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ABSTRACT

This report is volume 2 in a series of studies conducted and published by the Organisation for Economic Cooperation and Development (OECD) Programme on Educational Building (PEB) on the theme of coordination of school and community facilities. The report is intended to illustrate by means of concrete examples the general conclusions on coordination of school and community facilities that were published in the first volume of the series "Policies and Strategies." Three other volumes to be published will certain examples of developments in the United States, England/Australia, and Sweden. This volume reports in particular on the Centre Educatif et Culturel, at Istres, one of the first school and community centers of its kind in France. In addition to providing detailed information on the aims and history of the project, the programming and design method use, and the way the Centre functions at present, the project's difficulties and successes are analyzed. Complementing this material is a brief presentation of the context and the main trends that are characteristic of facilities coordination in France. In addition, the volume describes the method used by urban planners responsible for designing and constructing a major housing complex in Evry New Town to coordinate facilities and integrate them in their environment. (Author/MLF)

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BUILDING FOR SCHOOL AND COMMUNITY

II

FRANCE

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The main objectives of the Programme are:

- to facilitate the exchange of information and experience on aspects of educational building judged to be important by participating Member countries;
- to promote co-operation between such Member countries regarding the technical bases for improving the quality, speed and cost effectiveness of school construction.

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PREFACE

In recent years a number of industrialised countries have developed projects which in one way or another associate school buildings with community facilities designed for different functions or uses. Thus, school and non-school activities are accommodated within the same physical setting, implying relations of inter-dependence between the agencies and institutions responsible for the various activities. The countries participating in the Programme on Educational Building (PEB) decided therefore that the scope and significance of these experiences, which seem far more important than might be inferred from their limited number, called for closer analysis and clarification.

The PEB study on Co-ordination of School and Community Facilities consequently began by examining the why's and how's of projects which aim not only at meeting the educational needs of a community but also at creating a framework within which the overall social needs of the community can be taken into account. A certain number of concrete examples of co-ordinated facilities projects, drawn from various countries, were examined and most of these have been the subject of detailed case studies which are published in four separate volumes, each devoted to a given country (England/Australia, France, Sweden and the United States).

In addition, these individual studies have served as a basis for a further analysis which aimed at identifying common problems likely to be of interest to those concerned in Member countries, and at proposing strategies for action. This second phase of the study led to the preparation of a Synthesis based on the findings of the case studies and to the organisation of a Symposium on School and Community Building in Relation to Urban Dynamics held at Skokloster, Sweden, from 27th September to 1st October, 1976. The report on the latter is published together with the Synthesis in a separate volume under the title, Building for School and Community: I. Policies and Strategies.

The texts brought together in the present volume concern France. The most important among these is the case study report on the "Centre éducatif et culturel d'Istres" prepared, with the help of the Secretariat

by Guy Le Boterf, sociologist and member of Quaternaire Education, Paris. In order to relate the case of Istres to the general situation in France and thus give it a more precise significance, this report is preceded by a brief presentation of the French national context and the most characteristic trends as regards facilities co-ordination. This paper has been prepared by Rose Bergouignan, urban planner at the Direction de l'Equipement, Lyon. Finally, the third report provides a typical example of the way in which co-ordinated facilities planning is handled in French New Towns. It is a methodological study carried out by a multi-disciplinary team in charge of the design of a district in Evry New Town, not far from Paris. The preparation and publication of an edited version of this study was made possible thanks to the kind authorisation of the Groupement des Architectes de la Région parisienne (GARP) and the Union des Constructeurs (UCY).

The views expressed in the three reports which make up this volume are those of their authors and do not commit the OECD or the national authorities concerned.

CONTEXT AND TRENDS

by

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INTRODUCTION

Origins of Integrated Facilities

1. In France integrated facilities are a recent trend (Vth Plan, 1965-1970), resulting from a twofold development: the new towns and the opening-up of the school. The projects realised in the new towns cover a large area (20 000 to 30 000 square metres), and consist of community facilities grouped together around or close to a shopping centre. These integrated projects, located in the heart of the new towns, are conceived as poles of urban "animation" - nerve centres designed to vitalise the town or area. Projects completed or under way include the Agora d'Evry, the Cultural Centre at Pontoise, and the Piazza of Marne-la-Vallée. Projects developed out of the trend to open up the school have led to the creation of facilities on a smaller scale. These are of a socio-cultural character, the more modest projects being integrated with a primary or nursery school ("maisons de l'enfance" at Grenoble), while facilities at district level are integrated with a lower secondary school ("Collège d'enseignement secondaire - CES") as in the case of the Centres éducatifs et culturels at Yerres or Istres.

Original Features of the French Approach

2. The originality of the French approach lies firstly in the development of the projects by the so-called "pre-animation" procedure. Under this procedure a professional "animateur" or team of "animateurs" (Grenoble, new towns) acting in agreement with the financing authorities (State, municipal authorities), and in collaboration with the local associations, is given the task of conceiving facilities adapted to the socio-cultural characteristics of the population and the financial possibilities of the public authorities, in terms of investment and operating costs.

3. The second original feature of the French approach is to be found at the operating level. This involves the regular definition of an overall "animation" policy - either as a factor for social change or as a means to limit conflicts - by a professional team of cultural, sports, and social

"animateurs", under the control of a governing board including representatives of the financing authorities.

Integrated Facilities

4. This French approach has resulted in an object, or finished product, known as integrated facilities. Roughly speaking, integrated facilities may be defined as the grouping together, frequently in physical terms, of at least two institutions coming under different government departments or local authorities, or at least this was initially the situation. The project is financed, if not simultaneously, at least in coordination. At the operating level institutions forming part of the integrated facilities have joint objectives.

5. Architectural solutions have varied: total integration of floor areas, with no possibility for the subsidising ministries to distinguish the areas they have financed (Grenoble); definition of functional sets (Istres); efforts to make maximum use of certain areas (Yerres); or considerable importance attached to the reception and encounter function (Le Vaudreuil).

Importance of the "Integrated Facilities" Movement

6. To conclude this introduction, which focuses on the specificity of the French approach to integrated facilities, it may be said that despite much research, impassioned debate, seminars, study visits and power struggles, the movement has touched only a small number of towns, aroused only very specialised circles of urban planners and reached only a very few elected representatives in connection with the new projects. However, the innovations this new movement has brought about are worthy of note. The present paper will thus attempt to describe the process of facilities integration, consider the original solutions that have been developed at institutional level and conclude with some criticism of existing projects, the problems raised being at various levels.

Note: In the French terminology the term integration is used in preference to that of co-ordination. These two terms are not entirely interchangeable but the former has been kept throughout the present report as typical of the French context - the same remark applies to the use of the expressions "integrated facilities" and "co-ordinated facilities".

Part One
DEFINITION OF FACILITIES INTEGRATION

THE INTEGRATION PROCESS

7. Integrated facilities are the result of a long process which will first be described. The process has taken on different aspects from one project to another, and followed different stages. But the point of departure has always been the criticism of earlier habits and practices which may be described as compartmentalised, centralised, or ... irresponsible. This is true with regard to the usual planning of community facilities, but even more so if the aim is to intermingle the functions of these facilities with other urban functions or, in other words, if facilities are not to be separated from urban development.

First Stage - Criticism of Earlier Practices

i) Planning of Facilities and Implementation Context

8. Critical analysis of earlier practices implies in the first place establishing a link between planning and context. According to type of facility (school, social centre, cinema or sports stadium) and context /separate facilities in an existing town, or concerted development zone ("zones d'aménagement concerté - ZAC")/ the responsibility for financing and commissioning the work may be borne by various agents (State, municipality, private promoter, quasi-public establishment, etc.). In each case, the decision-making and financing machinery are totally different.

ii) Variety of Strategies According to Agents

9. This critical analysis can be taken further by describing the strategies of the different agents involved in the process of developing a community facilities project. First comes the "planner" who thinks up the project, drafts the plans and gives advice. He may be attached to one of a number of bodies: services of the ministry responsible for public works, housing and urban development ("ministère de l'Equipement") at the level of the Département or region, technical services of a municipality, technical services of urban development agencies or public establishments, or

again private consultant firms that sell their services to the above bodies. The planner is a specialist who does not make decisions. He proceeds in the absence of direct experience on the basis of knowledge backed up to a varying extent by surveys, studies, field research or documentation.

10. The planner must take into consideration a certain number of agents who vary according to type of facility and general context of the project. The most important of these are the government departments responsible for educational, social, sports, cultural and health facilities, etc. Then come the local authorities (municipalities, Départements), the private promoters of housing schemes or shopping centres, but rarely the users (teachers, pupils, health personnel, "animateurs", parents, inhabitants, etc.).

11. The government departments responsible have their own technical services, set up to implement government policy. They have their own conception of the service to be provided, the facility on which it depends and its mode of operation (staff requirements, management methods, "animation" techniques). As a result each government department has its own norms for facilities, taking into account size of population to be served, regulations governing the composition of the elements, areas, heights, etc., and even have standard plans for community facilities. All this illustrates the complete accord between functionalist theory and administrative compartmentation or the normal tendency for a specialised government department to set itself up as an exclusive authority on a category of population or type of need. Planning of facilities at national level thus consists in applying a series of standard schedules of accommodation or models (1 000 youth clubs, 1 000 swimming pools, industrialised CESs, models for hostels, etc.). Depending on the case, these government departments either retain full responsibility for the provision of community facilities, and thus make the main decisions as to the location and form of such facilities or act as the subsidizers and as such oblige those responsible for commissioning the works (usually the local authorities, but also quasi-public agencies, public establishments, etc.) to comply with their rules, norms and models. Certain integrated facilities have drawn attention to the highly coercive and frustrating role played by the large government departments (Education, Youth and Sports, Social Affairs, Cultural Affairs).

12. As far as the local authorities are concerned, it is unnecessary to emphasise the importance in local political life of the discussion on community facilities. This is visible, first, at the level of planning a

major stake in bargaining between representatives of the State and those of the local authorities for the distribution of grants and subsidies. It is also apparent at the level of operation of the facilities. Although in many cases, (schools, day nurseries, youth centres, gymnasiums, etc.), the local authority itself acts both as the building agency and principal manager, its responsibility for implementation is often only apparent. The municipal authority is not in fact free to decide which type of community facility ought to be given priority on its territory, which forms are the most suitable and where they should be located. With regard to the type and form of the facility the municipal authority is frequently by-passed by the State, through the central government directorates at Département level which in most cases decide on the distribution of investment funds in the Département and make absolutely sure that the rules and norms of their Ministries are applied. The municipalities have little freedom to manoeuvre, as they have long been accustomed to working within the framework of national constraints. In the location of community facilities the determining factor is of course the cost of land. It is indeed true that the municipal authority has a power of initiative and decision with regard to its programme of community facilities and its organisation in terms of time and space. But that power is greatly limited by regulations and financial constraints and by a flagrant lack of information, particularly as regards finance, owing to the difficulty of obtaining a global and precise picture of the level of investment and operation budgets. This rules out economic optimisation of a policy for facilities provision.

13. The power of the promoters, on the other hand, is almost absolute for certain types of community facilities, for example as regards outdoor areas on housing estates, shopping centres, and residential community premises. Regulations on these points are in fact, either non-existant or too vague to be effective. The balance of power exists in fact only in the case of concerted operations (concerted development zones or contract specifications).

iii) Centralisation

14. The integration process has therefore contributed to criticising and emphasising the disadvantages of current practice, which is strongly affected by the centralised nature of the French political-administrative

system.(1) As a result, needs are defined in abstract and stereotyped terms, there is a temptation to impose national policies (e.g. series of 1 000 swimming pools) which are difficult to adapt locally and make for inadequate solutions from the point of view of urban planning. At the same time demand from local authorities is distorted in favour of up-to-date models, while a brake is put on the creation of non-standard facilities (e.g. integrated facilities). The role of the public works services at Département level is ambiguous, for they are responsible for developing urban planning yet have no real powers of co-ordination, despite such attempts as the "single budget line" in respect of community facilities. Moreover, when an investment is decided no allowances are made for practical problems at the operational stage nor is there any preliminary reference to the processes of appropriation of community facilities by future users. But no criticism of centralisation can dispose of the difficult problem of how to reconcile national policies decided upon by the government with the responsibilities of local authorities and the participation of users.

Second Stage - Basic Thinking

15. The second critical stage in the integration process was wider in scope than the analysis of the strategies of the different agents with regard to community facilities. It was also an exercise in basic thinking

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1) The French political-administrative system is hierarchical and comprises a number of different levels of responsibility and decision-making:

The first level is that of the municipality. The French municipality varies in size and population (from the village of 500 inhabitants the town with over a million) and is governed by a municipal council and a mayor, both elected.

The Département is the level immediately above; it is headed by a Préfet, a civil servant representing central government. He has authority over the services of the Département but some of his decisions are subject to the deliberation of the General Council, a body of elected representatives.

The region is headed by a Préfet of the region. He has at his side a Regional Council composed of representatives elected among the General Councillors of the Départements and the mayors; it is this assembly that votes the regional budget. The decisions of the Préfet are prepared by another body, the regional public establishment composed of officials. A third body plays a consultative role and represents the economic forces in the region; it is the economic and social advisory committee.

At national level, there are, besides the political forces (head of State, government and parliament), the central government departments of which the external services (at Département and regional levels) are directly dependent.

It is to be noted that, among these various levels of decision-making, the region - only recently created - has not yet any real power because of the slenderness of the resources at its disposal. Moreover, it does not in all cases represent a real economic, geographical or historical entity.

on different aspects of urban development.

i) The Town

16. The first subject for critical thinking was the town itself. This is an entity which performs a number of functions since it comprises various mono-functional groups and institutions. However, the relationships between these groups and institutions have so evolved that the urban community today is less closely welded together, less homogeneous and less interdependent than before. The physical disintegration of the modern town, which is becoming merely a built-up area, is a sign of this social disintegration. Urban development based exclusively on demographic, technical and economic considerations, has probably been the initial and the ultimate reason why towns have lost their personality which is now consigned to folklore and other more trivial relics of the past. But a town is not mainly a collection of utilities, services, traffic and other functions provided and used in isolation. Its value and originality results from the combination, interpenetration and conjunction of all these elements, and all these functions.

ii) The Urban Centre

17. The urban centre is a theme which was considered by other research teams with a practical problem to solve e.g. the creation of a new Préfecture. It undoubtedly provides a number of specific services, but its power of attraction as a whole greatly exceeds the sum of attraction exercised by each of its functions taken in isolation. These must be selected, moreover, in order to give it quality and meaning. The resulting development decision was to promote organisation around a vigorous centre, with a high concentration of facilities.

iii) The Vitalisation of Urban Life (Urban "Animation")

18. The third field of investigation concerned the vitalisation of urban life or urban "animation". Three types can be distinguished:

The first relates to the spontaneous constitution of a crowd in a street (shops, cafés, cinemas, etc.), a fair, a market, a sports event etc., i.e. urban "animation" as such.

The commercial "animation" in turn consists in the gathering - in a commercial gallery, a shopping centre - of all those who come to do their shopping; it can be either spontaneous or organised by the tradesmen using various means to attract people.

Another form of "animation" has recently been developed in a number of French towns, namely that connected with the street: carnival in Strasbourg and Montbéliard, tumblers and music in the streets of Aix, fêtes in the new towns, etc. This type of "animation" is organised by institutions or teams of "animateurs". Its purpose is to create a link with the tradition of fêtes as in old times and to put streets and squares to other uses than those of commercial exchanges and car traffic.

Cultural and socio-cultural "animation" can be defined as all activities and events organised by institutions such as cultural centres, youth centres, "maisons de l'enfance" etc., to which should be added that of facilities which by their nature or status have no "animation" objective (museums, libraries for example). This type of "animation" depends on concertation between users and "animateurs" in order to realise a project jointly.

Finally, a last type may be mentioned although it will not be considered in this paper, namely what is today known as "cultural-commercial animation" despite the fact that the terms "culture" and "commerce" are antinomic. It relates to the financing by tradesmen either of cultural activities (public performances, theatre, concerts) or of street animation (theatre, marionnettes, parades etc.). Some commercial promoters also finance directly the building of cultural centres or art/craft workshops for children.

However, the various research teams have not aimed at providing complete definitions. They have approached the notion of "animation" through concrete aspects: vectors, conditions and agents.

19. The vectors and poles of "animation" are, traditionally, community facilities. But in order to enhance the quality of service of each "compartmentalised" facility, action has been taken to group facilities with similar or complementary objects, on the assumption that grouping increases the number of functions as compared with facilities located separately and thus fosters social life. Such groupings are equally appropriate for a town centre (Evry), and for neighbourhood units (Saint Quentin-en-Yvelines). In the latter case the structures necessary for "animation" activities comprise school buildings, small shopping centres, residential community premises and youth centres.

20. How can the conditions necessary for the vitalisation of urban life be created? Various solutions have been found; a pedestrian walkway resembling a street, with dwellings and facilities opening on to it; a

pedestrian precinct, a kind of square with a high concentration of facilities; a road for both vehicles and pedestrians to provide opportunities of "encounter"; the building of shops close to or integrated with public facilities, so that the latter may benefit from the commercial "animation"; and finally, the choice of a very dense urban structure.

21. The agents of "animation" have been the teams set up for that purpose, the idea being that "animation" should begin before the arrival of the first residents. These teams have been financed by certain government departments (Youth and Sports, Cultural Affairs), sponsored and supported by the local authorities (public establishments in the new towns, municipal authorities). They are composed of the persons to be responsible for the facilities, and are set up at least one year before the facilities are made available to the public. The overall objective is to facilitate the appropriation of the facilities and the town by its new residents. To this end, by formally associating future residents and future users of the facilities, it has been possible to define future action in the district, thus paving the way for co-ordinated operation. Having regard to the French context, this concertation, which takes place at various levels, has been the most original and noteworthy stage in the integration process, making it possible to arrive at a co-ordinated management structure.

iv) Community Facilities

22. The last field of critical analysis concerned community facilities ("équipements collectifs" which is the administrative term now used in France). But the term, as well as what it covers, has varied over time as can be seen from a study of the reports of the various French development plans. The implementation report of the Ist Plan ("Plan de Modernisation et d'Equipement" - 1948-53) refers to "public facilities", broken down into economic, research and education, social and administrative facilities. A similar report from 1951 refers to community facilities for tourist winter sports stations ("l'équipement collectif des stations de tourisme d'hiver"). The IInd Plan (1954-57) recommends reducing the provision of community facilities then called public services, although in 1956 reference is made to cultural and social facilities. As during the IIIrd Plan (1958-61) the crisis to be overcome is that of education, the only community facilities considered being educational facilities. The IVth Plan (1962-65) introduces for the first time the term "équipement collectif". To avoid confusion in respect of financing, a distinction was made between urban facilities ("équipement urbain") financed by the Ministry of the Interior and the community facilities ("équipements

collectifs") as such financed by the other ministries. The Vth Plan (1966-70) keeps the term "équipements collectifs" whereas the VIth Plan (1971-75) adds others: community function, community service, public service, public facility, superstructural facility. All the above remarks point to the ambiguity of the notion: for example, a Préfecture, a prison, a youth centre, a bistrot or a pub are community facilities ("équipements collectifs"). Since it seems impossible to contain this notion within one single definition, the various research teams have adopted a negative approach for their analysis by studying the underprovision ("sous-équipement") in new urban areas.

23. The fact that existing facilities are inadequately used, sometimes due to non-attendence by various publics, may be attributed to overspecialisation, leading to discontinuity in services and segregation of customers. What can be done to ensure that sports are no longer limited to a minority with a view to competition, and instead becomes a means of expression for the greater number? How can the requirements of continuing education be reconciled with the rapid development of knowledge? What action can be taken in the health and social fields to bridge the gap which separates the underprivileged, the old and the handicapped from normal life? Recent developments alone, therefore, point to the need to break down the compartmentation between traditional facilities, as it is not possible to meet qualitative criteria or satisfy changing needs by applying existing norms. If the facilities are to become instruments of community life they must be conceived globally and not by individual ministries and consideration must be given to their interrelationships, location and design. As a result of this approach facilities have been combined and sometimes merged, thus representing not the sum of services but a multiplication of services.

24. Some research teams have not only called in question the overspecialisation of facilities, but have challenged existing norms. In the field of education in particular, three urgent requirements emerged: to open up the school to the town, to ensure continuity of education throughout the years of schooling and to develop complementarity of activities in the context of new teaching methods. The solutions found were "nurserisation" of the infant classes in primary school, individualisation of education, introduction of "setting", abolition of the class concept with a view to ensuring through teamwork by teachers and "animateurs" that no pupil has to repeat. The criticism of the traditional educational system has implied an extension of the debate to include the education of adults who are to be given opportunities for training in neighbourhood facilities. It is essential to emphasise that in most integrated

facilities projects, educational options have invariably served as the point of departure for calling in question existing norms.

Third Stage - Definition of Objectives

25. The third stage of the integration process has concerned the definition of objectives which constitute the basis of all project strategies: educational and cultural objectives, objectives related to urban "animation" and objectives concerned with the rationalisation of administrative action and economic management.

26. The educational and cultural objectives have led to the renovation of primary and lower secondary education; the opening of the school to new activities by co-ordinating the action of various institutions (social centres, youth centres, libraries, sports facilities, day nurseries, crèches, etc.); and the creation of structures for continuing education. The problem may best be illustrated by recalling the policy behind the Grenoble project: "the guiding principle of the project is continuing education for all residents of the district. In practical terms this will imply unifying the conception of school education and providing the possibility for adults to obtain training in the facilities of the neighbourhood, so that these facilities are directed outwards and not inwards".

27. In the "animation" objectives two concepts are intermingled: one of social life, and the other concerning urban "animation" as such. The integration of facilities is in fact designed to encourage the creation of genuine centres of social life playing the part in these new town areas of the old village square. People can meet there, get to know each other, hold discussions and engage in joint activities. Very explicit reference is made to these objectives in the new towns where facilities are scheduled to play an important part in ensuring that towns do not become excessively functional and fragmented, but continue to be centres of social life. The achievement of these objectives, in the new towns, has meant priority for facilities in town centres with the integration or proximity of private and commercial facilities (cafés, drugstores, shops, etc.).

28. The objectives which concern the rationalisation of administrative action and economic management have been defined both by government departments and elected representatives. They are both ambiguous and complex and expressed at the outset in terms of economies: at Grenoble, for example, the integration of facilities has enabled a large area to be made available for use as an urban park. The objectives also include savings in floor area. Again in Grenoble, the integration approach has yielded a total area of 59 720 square metres, whereas conventional plannning would have provided

70 200 square metres. Some saving might also be expected in the implementation of the project, but apart from the fact that it is difficult to compile a financial balance sheet for integrated projects, the extra cost of the innovation these projects represent cannot be overlooked. Furthermore, the data to be compared would have to be comparable, i.e. two districts with identical populations, one with conventional and the other with integrated facilities. But it is a well known fact that the former usually has no more than the "obligatory" facilities (schools in particular), the other facilities (sports, social, cultural), appearing 10 to 15 years after the first dwellings are made available. In these circumstances, the public authorities responsible have to be more or less called upon to provide all the facilities for a district in a shorter period (2 to 3 years) by rationalising and co-ordinating their action. Similarly, the point about integrated facilities is not that they can be operated more economically but that their management is rationalised. To use the words of the Grenoble team: "in our programme, the cost per square metre will be higher. But against this we shall have a higher land occupation ratio and will avoid a complete scattering of facilities. The services given will be incomparable. The user will find in the same facilities possibilities for vocational training, cultural and sports activities, for relaxation and leisure, social services and catering. There will be fewer children per class and their education will be better adapted to their potentialities. They will have a more balanced education. They will be better integrated in the life of the community. Facilities will be used to the maximum, operating on the principle of full utilisation. Their many potential uses (multi-purpose areas) will, if necessary, make conversion possible in the medium term".(1)

29. This long integration process which it was felt necessary to recall here since it is specific to the French context, has produced objects, finished products, buildings designed on new lines, to which the term integrated facilities is applied.

INTEGRATED FACILITIES

Defirition

30. The definition of integrated facilities as given above (paragraph 2 to 5) relates to the early projects, and a second definition may be

1) Villeneuve de Grenoble. Quartier 1, proposals for the provision of cultural and socio-educational facilities, March 1970.

attempted in the light of experience. This concerns facilities which are not necessarily grouped together physically and spatially, but are planned to function together from the outset. These schemes are more flexible and better adapted to the different contents in which they are implemented (urban expansion areas, urban renewal areas, existing districts, etc.) and to different local situations (available land, housing, population, etc.). However, their common feature is to be predominantly socio-educational and cultural and especially, as a result of new management techniques, to offer the opportunity of co-ordinating the action of the different institutions with a view to common objectives.

School Facilities in Neighbourhood Units and Districts

31. The components of integrated facilities projects vary from one case to another, depending on how often they are planned and the size of the population to be served. In the first place there are the facilities for a district or neighbourhood unit which are always centred around a school (CES for districts, primary and nursery schools for neighbourhoods). At these scales of urban development, the idea of integrating facilities did in fact originally stem from the concern to remedy the crisis of education and break down the barriers between school and community. Around the CES (serving a district with a population of 10 000) other facilities are added catering for: cultural activities, guidance and information, sports, health and social services.

32. The "CES - Maison de quartier" at Grenoble, for example, comprises: a CES with a specialised education section, a guidance and information centre, a library, an audio-visual centre, a multi-purpose hall, a youth centre, a social centre, a day nursery, a restaurant. The catchment area for such a set of facilities is that of a district of about 10 000 inhabitants. The Centre éducatif et culturel at Istres is composed of: a CES, a cultural centre, a museum (planned), a library, indoor and outdoor sports facilities, a swimming pool, a vocational guidance centre, a psycho-pedagogical centre, a local section of the national employment office, a social advancement centre, a health centre, a youth or leisure centre and a restaurant.

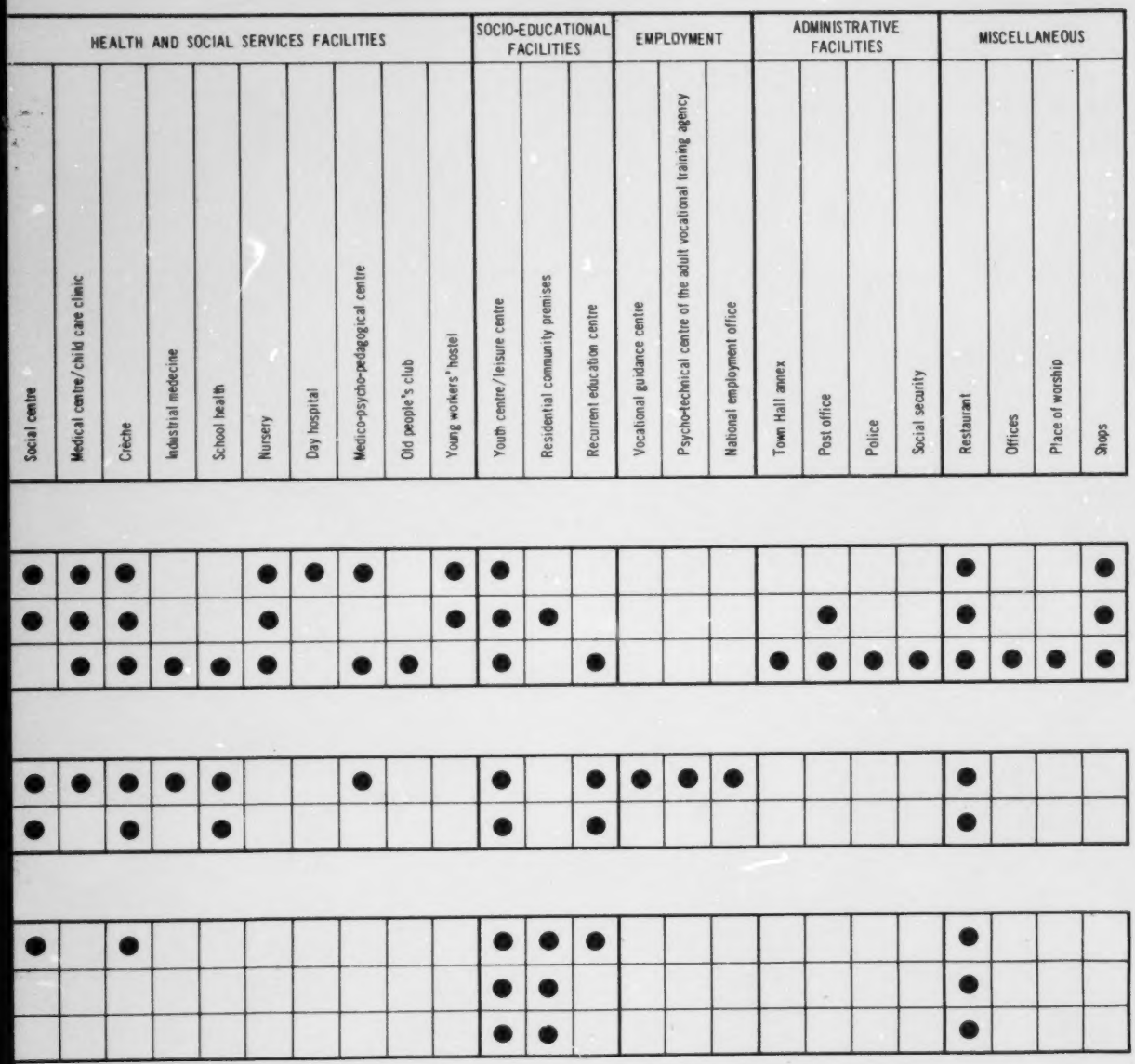
33. At neighbourhood level, for a population of 3 000 to 6 000 the point of departure is the primary and nursery schools. To these are generally added facilities designed for early childhood care: ante-natal clinics, crèches, day nurseries or open air centres.

INTEGRATED FACILITIES IN

PROJECTS \ FACILITIES	SCHOOL FACILITIES							CULTURAL FACILITIES					SPORTS FACILITIES			
	Lower secondary school (CES)	Technical vocational school (CET)	Special education section (SES)	Polyvalent upper secondary school (lycée)	Primary school	Nursery school	Educational guidance and information	Public library	Public performances/ theatre/ cultural « animation »	Museum	Language laboratory	Audio-visual centre	Indoor facilities	Outdoor facilities	Swimming pool	Skating-rink
IN NEW URBAN AREAS (25 000 to 45 000 inhabitants)																
Marne-la-Vallée (Quartier V)	●	●	●		●	●		●					●	●	●	
Marne-la-Vallée (Noisy Est)	●			●				●	●				●	●	●	
St-Quentin-en-Yvelines (Centre des Sept Mares)	●			●		●	●	●	●		●	●	●	●	●	●
IN OLD URBAN AREAS UNDER DEVELOPMENT (about 20 000 inhabitants)																
Centre éducatif et culturel d'Istres	●						●	●	●	●	●		●	●	●	
Centre éducatif et culturel du Val d'Yerres	●							●	●				●	●		
DISTRICT FACILITIES (5 000 to 10 000 inhabitants)																
Grenoble : Maison de Quartier de l'Arlequin	●		●				●	●	●		●	●	●	●		
Le Vaudreuil : Centre éducatif et culturel secondaire	●		●					●					●	●		
Quiberon : Centre éducatif	●	●						●					●	●	●	

Based on *Les équipements intégrés*, study by Rose Bergouignan and Simone Martin, Agence d'Urbanisme de l'Agglomération grenobloise, ministère de l'Equipement,

SOME FRENCH PROJECTS



ministère de l'Education nationale, February 1973.

Integrated Facilities in the Centres of New Towns

34. Integrated facilities in the centres of new towns have a quite different dimension, their special feature being to integrate private and commercial facilities or operate in their immediate vicinity (Agora d'Evry). Private facilities are generally those which make up a shopping centre (supermarket, medium-sized self-service stores, ordinary shops, cafés, drugstores, cinemas, etc.). Public facilities are varied in nature: administrative (Préfecture, town hall) and para-administrative facilities, cultural facilities (library, museum, exhibition hall, theatre, school of music, educational documentation centre, etc.), health, social, sports facilities and sometimes facilities for seminars and congresses.

Facilities Integrated in the Urban Setting

35. In the various projects the integration of facilities has often been accompanied by, if not perfect integration, at least a strong connection with the elements making up the urban setting, e.g. a strong link between integrated facilities and housing at Grenoble (where facilities are placed on the ground floor of or next to blocks of flats); and a link between facilities and a natural park (Istres) or an urban park (Grenoble). But above all, the aim was that integrated facilities should constitute an important element of urban organisation (neighbourhood, district or town centre). For this reason they have sometimes been located alongside a pedestrian way, as in Grenoble, where they also act as a link between dwellings and green areas. At Vaudreuil, the pedestrian way links the integrated centre with the shopping and leisure facilities. In other cases the integrated facilities are organised around squares (Elancourt-Maurepas) or around nerve centres for specific activities.

Part Two
PLANNING OF INTEGRATED FACILITIES

THE INPUTS

36. Quite aside from all the basic thinking outlined above, the planning of integrated facilities has in no case been based on a standard approach or entailed the elaboration of specific regulations. The conditions that enabled integrated facilities to be implemented were investments of every kind and these investments reflected a local desire to ensure a certain type of urban development, towards which the integrated facilities would contribute, aiming at achieving a certain degree of "animation" and social life. These investments have varied from one project to another but it is still possible to classify them. They consisted of a substantial research input, an institutional and relational input, often a financial input and a desire for concentration.

Research input

37. The substantial research input took the form of multi-disciplinary teams grouping designers (architects, planners, sociologists), specialists from certain authorities and the users themselves ("animateurs", social workers). This inter-disciplinary approach was organised informally in Grenoble but was more fully structured in the new towns largely because of the complexity of the problems to be resolved.

Institutional input

38. The first of the institutional inputs was the inter-ministerial Committee on Integrated Facilities set up by the Prime Minister on 1st October, 1970. It consisted of representatives from ten ministries with instructions to "consider the whole range of problems involved in the planning, implementation, management and 'animation' of facilities designed for the co-ordinated development of certain educational, cultural, social and sports activities; to co-ordinate the contributions of the different government departments and bodies concerned, assess their achievements and make a synthesis of the various projects; to formulate

recommendations and suggest appropriate action to give the recommendations effect. Multi-purpose facilities also fall within the scope of the Committee". It will at once be noted that the Committee is a national one and consequently subject to the constraints of centralisation. Not having had any funds it has never had powers of decision and has confined itself to research, co-ordination and the formulation of proposals and recommendations. However, any projects it examined were given a kind of hallmark.

39. The institutional inputs as regards co-ordination in the new towns was the "Bureau central des villes nouvelles", set up by a decision of the Prime Minister on 23rd December, 1970. This again is an inter-ministerial body chaired by the governor general of the Crédit Foncier and administered by an "inspecteur des finances". The team operating in the new town of Vaudreuil perceived this body in the following terms: "If any complication were to arise in the procedure, e.g. in the implementation of integrated facilities dependent on more than one ministry it would be the task of the local working groups and the ad hoc committee of the central group responsible for the new towns to help to reduce the length of the various administrative phases to ensure that the facilities of the new town are made available within the time limits planned".

40. At local level certain co-ordinating structures were developed on a less institutional but yet continuous basis as they were central to the dynamics of each project. Examples are: urban planning agencies (as in Grenoble) or existing administrative structures (the regional Préfecture, in the case of Istres). These local co-ordinating mechanisms were in some cases supported by certain exceptional and highly motivated personalities, able to obtain assistance through their special connections e.g. a mayor who also happened to be a member of parliament, a minister or a senator or some key figure in the regional administration.

Financial Inputs

41. Large-scale financial inputs are sometimes provided by a strong municipality (Grenoble) but in most cases concern the new towns. The funds for the latter stem from the "finalised programmes" on the basis of which the special financial envelopes for the new towns are defined, granted as a supplement to the normal appropriations. The "finalised programmes" are therefore a real advantage and ensure that allocations are available simultaneously, thereby facilitating the integration of facilities.

Concertation

42. Concertation is the most noteworthy stage in the planning process of integrated facilities. The different generations of integrated facilities are undoubtedly due to the way in which concertation has evolved, the facilities having become increasingly complex with the gradual structuring of the dialogue between services, associations, users and authorities none of which had previously been accustomed to discuss a joint project.

43. In the first projects at Yerres and Grenoble, concertation was informal. At Yerres, it was senior officials from the central government departments (Education, Youth and Sports, Cultural Affairs) who met on local initiative to discuss the project. This initial team was known as the first inter-ministerial committee and certain of its members sat on the official inter-ministerial Committee referred to above. When the dossiers were negotiated with the ministries concerned in the case of Grenoble, consultation between certain local elected representatives and certain officials from central government departments was more fragmented, but concertation was largely at local level.

44. The second generation of integrated facilities was characterised by a more organised type of concertation, particularly at Istres and Evry. At Istres, working committees composed of regional and Département officials, chaired by the mayor, were set up at the outset on the initiative of the Préfet of the region. These committees jointly worked out the entire programme for the Centre éducatif et culturel and it was incumbent on each of the administrative services represented to specify clearly the nature of its participation in the project. The direct support of the regional Préfecture and its co-ordinating role at the level of the region and the Département enabled the various administrative services to work out a joint project. This concertation has continued throughout the development, implementation and operation of the project. At Evry concertation took place in stages which were determined by the nature of the participants. At the outset these were the institutions and services at Département level, followed by the inter-ministerial Committee which had been set up for Yerres, the official inter-ministerial committee which had been established in the meantime, the local authorities and finally the commercial promotors. Evry was in fact the first project in which public and private facilities were integrated.

45. The third generation of integrated facilities may be exemplified by the Vaudreuil project in which concertation was systematically organised in the form of working groups dealing with sectoral problems and a number of highly specialised sub-groups. These groups worked to a precise

timetable and were "animated" by social psychologists. They consisted of representatives of the users of the facilities, representatives of different associations, a number of practitioners specialised in the facilities concerned, decision-makers (responsible officials from the ministries concerned), elected representatives and members of the research team. These working groups were set up with several objectives in mind: a technical objective concerned with the utilisation of available skills; an educational objective vis-à-vis specialists and decision-makers; a pre-operational objective, as pre-operational studies could be conducted with those responsible; and a policy objective, as all those who were preoccupied by the conception of the "town germ" took part in these dialogues. The notion of "town germ" shows the temptation there is to compare the town to a living organism and its history to an evolution. The "town germ" is thus to the town what the child is to the adult.

QUESTIONING OF NORMS

46. These substantial inputs enabled several innovations to be made in the planning of the facilities, i.e. the determination of needs, and the definition of functional sets and the physical links between them.

Needs Called in Question

47. Most of the research teams have called in question the needs as expressed in existing norms (so many square metres for so many inhabitants), stereotyped and applicable to the country as a whole. At Vaudreuil for example it is anticipated that the future population will be that of large housing estates, generally young with young children. This factor has consequences in the first instance for educational planning. Moreover, it was necessary to ensure a continuous adjustment between the size of facilities and the number of housing units built in order to avoid excess facilities. Provision was therefore made for the possibility of extending facilities and even for converting them to other uses.

48. Grenoble has instead concentrated its efforts on correcting the school building norms for two reasons. The first was to take account of the anticipated population structure which could be compared with the populations in large housing estates in the conurbation ("village olympique, cité Mistral"). In these estates a strict observance of the norms had resulted in deficiencies at the level of the nursery school (only four- to five-year-olds could be enrolled) while there was over-crowding in primary school classes. The second reason is the type of educational

approach adopted at Villeneuve de Grenoble. This educational innovation is in line with official proposals which aim at opening up the school to life and the town, are expressed by the division of the school day and curriculum in three parts of equal length but of varying activities and by the adoption of setting and imply a limited number of pupils per class and a re-organisation of the conventional classrooms. The volumes of the new rooms are not officially delimited once and for all nor do their floor areas correspond to the norms; instead they may either be divided up to allow work in small groups or be combined to enable several classes to gather together and pursue joint activities.

Functional Sets

49. The functional sets designed to take over from the traditional facilities are determined in the light of a number of objectives intended to rule out any segregation by types of population, age groups, etc., ensure continuity in the services provided and optimum utilisation of facilities, etc. The concept of functions and of functional sets were arrived at by two different approaches.

The first was a pragmatic approach and consisted in making an inventory of the needs of the anticipated population, irrespective of any notion of facilities, and of translating them into functional terms, bearing in mind that they may be complementary, superposable or conflicting. The needs identified by the Grenoble team were: education, vitalisation ("animation") of the neighbourhood, social advancement for adults, creativity (art/craft workshops), culture, documentation, etc. The functional sets are the result of the above needs.

The second approach adopted at Evry was more methodical and sought on the basis of a facilities programme established according to the norms but modified in the light of the specific characteristics of the publics concerned, to bring forth, for each facility contained in the programme, potentially identical or complementary functions. This analysis, facility by facility, made it possible to identify the principal function of each and distinguish those facilities which ought to remain individualised owing to their specific purpose (swimming pool skating ring, dispensary, crèche, etc.) from those which have secondary as well as principal functions and can therefore be integrated. The functions highlighted in the case of the Agora d'Evry were: information, mediathèque, art/craft workshops, public performances, offices, etc. To these functional sets were added specific facilities which though not integrated were architecturally interlocked or juxtaposed.

Spatial Links between the Functions

50. The last innovation in terms of planning was to consider how the functions thus identified could be spatially linked either in an integrated complex or as part of the various functions in a district. The spatial links between components of a given facility may be illustrated by the project of the Centre administratif et culturel at Le Vaudreuil. The project is organised around two focal points i.e. a covered market and a documentation and information centre. Around the covered market, close to the river, are located exhibition areas, squares, bus stops, cafés, shops and restaurants. The documentation centre which is in the vicinity of the covered market is linked to the premises of the continuing training centre and the secondary school (CES). Le Vaudreuil also provides an example of spatial links between functions in a district. The first point to note is that the distance between the judiciously distributed functional sets is never more than 400 metres and can be walked. The second point is that the sets are connected to the different components of the urban environment i.e. the road system, public transport, pedestrian ways, green areas, office areas, etc.

DIFFICULTIES ENCOUNTERED

51. This brief review of the way integrated facilities are planned may be concluded by mentioning some of the difficulties encountered by the different research teams.

Centralisation

52. The first difficulty, as was stated at the outset, arises from the centralised nature of French administration. In particular, it was found necessary in planning integrated facilities, to arrange for concentration with the decision-making bodies. But in many cases the latter were at central government level and very rarely at regional or local level.

Administrative Compartmentation

53. The second difficulty is due to the fact that the different ministries have no common policy with regard to community facilities. This compartmentation is reflected in the differences in subsidy rates and their method of calculation. Subsidies are sometimes paid in a lump sum, sometimes represent a percentage which varies annually according to the overall appropriations made available to the ministry concerned and are sometimes

calculated according to complex formulae. Furthermore, the subsidy rates are applied to expenditure ceilings which have no relation to actual building costs. In these circumstances it is difficult to draw up a physical and financial programme and subsequently integrate areas for which the government subsidy per square metre varies considerably.

54. It must also be remembered that the dossiers have to go through a diversity of administrative channels and that decisions on community facilities have to be taken at different levels i.e. Département, region and central authority. The fact that there are several decision levels has nothing to do with the scale of the facilities. The reason is simply that certain ministries have devolved more authority than others. A further factor which acts as a brake on integration and is particularly revealing of administrative procedure is that facilities are standardised (youth centres, centres for old people, social centres, etc.) or industrialised or built throughout the country according to the same industrially-developed model (1 000 swimming pools, 1 000 youth clubs).

55. There is also administrative compartmentation in the management of the different facilities. Certain of them are self-sufficient (schools), some are widely open to outside influence (cultural centres) while others have a comparatively democratic method of management (youth clubs, "maisons de l'enfance").

State of Municipal Finance

56. The final type of difficulty encountered in planning integrated facilities arises from the financial position of French municipalities. Their resources decrease from year to year although not necessarily in absolute terms. But they have to ensure a level of services which is more and more sophisticated and implicitly demanded by our type of society. In addition, the proportion of total costs covered by State subsidies for the various facilities, whether road networks or superstructural facilities regularly decreases. For example, the way in which the State subsidy for primary schools is calculated has not been revised since 1963. The municipalities also have complete financial responsibility for the operation of facilities. Thus the contribution of the municipalities becomes all the heavier. Nevertheless, they remain extremely dependent on the slightest subsidy since the latter opens the possibility of obtaining loans at low interest rates from the Caisse des Dépôts et Consignations.

Incidentally, subsidies are granted facility by facility, which makes it impossible for the municipalities to draw up an overall building programme for the facilities regarded as essential - and yet this is a prerequisite for planning integrated facilities. As a result of this situation municipalities are unable to draw up a financial programme which would permit if not simultaneous provision of facilities at least a relatively coherent programme by annual instalments.

POSSIBILITIES OFFERED BY EXISTING REGULATIONS FOR THE INTEGRATION OF FACILITIES

57. Despite centralisation, administrative compartmentation and the tutelage exercised by the State over the municipalities, there are a number of possibilities under existing regulations to deal with the problems facing municipalities in respect of facilities provision. These statutory possibilities which will be described in the following paragraphs are unfortunately not current practice. There is in fact a very wide gap between what the regulations do effectively allow and the use made of them. The working party of the Land Use Plan (see below) could for example be the starting point of a large concertation. In actual fact, it is generally confined to a dialogue between three partners in which the officials of the various services of the Départements have the power of decision, the urban planners the skills and the power of information, and the elected representatives little say in the matter.

The Land Use Plan

58. The Land Use Plan ("plan d'occupation des sols - POS") is the first of these statutory possibilities. This is a legal document in which land tenure is determined at the level of lots; it applies to municipalities of over 10 000 inhabitants. It is a short-term plan, covering 5 to 10 years, the objective of which is to specify the conditions and possibilities of land use by dividing it into urban zones, natural zones, land reserved for road and bridge construction projects, activity zones and land reserved for community facilities. It involves a body of simple rules with which third parties are obliged to comply.

59. In looking at the POS procedure more closely, it will be seen that it calls for preliminary investigations. With regard to the problem with which we are concerned i.e. community facilities, it will be noted that one item of these preliminary investigations is an inventory of existing and planned facilities. The inventory immediately raises the problem of land

reserves which, in terms of integration of facilities or overall policies for facilities provision, no longer ought to be based on the arithmetic of norms but rather on a more qualitative set of factors specific to each municipality. For example, should facilities be concentrated in the centre of the town, to consolidate it, or on the contrary should small-scale dispersed facilities be provided which are often more easily appropriated by certain disadvantaged social groups (foreigners, manual workers, old people, etc.)? How can old, redundant facilities be put to new uses and what new purposes can they be made to serve? How can account be taken of new needs arising from certain reforms or changes in society (continuing training, educational innovation, employment of women, growth of demand for culture and leisure activities, etc.)? Thus, the inventory of existing and planned facilities (whether thought of as concentrated or dispersed) is to be taken into account at the level of the preliminary investigations, this raises a series of specific problems for the POS since it has to be translated in terms of land use and entails acquisition of land and buildings.

60. The POS procedure also involves "joint elaboration" i.e. its preliminary investigations are conducted by a working party which consists of representatives of the government services (officials at the Département level concerned with the road network, the major infrastructure and superstructural facilities, etc.) and the representatives of the local authorities (elected representatives and officials of the technical services of municipalities). The POS working party is also open to other persons which are not statutorily members, according to the type of problems it has to study. These may be representatives of associations, chambers of industry or commerce, professional groups, etc. The composition of the POS working party offers two advantages. First, it is the general reflection of local wishes in urban development matters,one aspect of which is a consistent policy for the provision of community facilities and local wishes have always been a prerequisite in the planning and implementation of integrated facilities. Secondly, the POS working party represents, so to speak, the institutionalisation of a wide-ranging concertation and it has been shown that this is an essential step in planning integrated facilities.

61. All this preliminary work culminates in a number of reports some of which provide a real introduction to the problems raised by facilities provision. The first document which concerns us is the introductory report. It is important for it summarises the preliminary investigations and even if it does not provide the exhaustive inventory of facilities it at least sets forth a number of the objectives on which their location

depends. It is also a reflection of local wishes with regard to the organisation of facilities. In these circumstances, the desire to integrate facilities may perfectly well be expressed in the introductory report. Finally, it is important because it expresses the continuity of action and, so to speak, acts as a "memory" at a later stage when the POS is given effect and land is acquired. The second important document with respect to community facilities is the list of land reserves. The various locations are shown in the form of diagrams.

The Concerted Development Zones

62. The second way in which existing regulations may promote the integration of facilities is through the concerted development zones ("zones d'aménagement concerté - ZAC") procedure. It will be remembered that the ZACs are not provided for in the POSs but they are a method of coping with any urgent problems with which a municipality has to contend e.g. urban renewal, new urbanisation due to a mass influx of new inhabitants, etc. The "ZACs are zones within which a community (municipality) or a public establishment (new town) can decide to act in order to develop and equip sites, or have this done, particularly those that will be acquired by this community or public establishment, to be transferred or granted subsequently to public or private users". The following paragraphs refer solely to residential ZACs (urban renewal of a town district or extension of a town). The possibilities which the ZAC procedure may offer in connection with integrated facilities are of three kinds: documents, concertation and the issue of a circular.

63. There are several documents which take into account the problem of facilities integration. The first is the summary report on the initial dossier ("dossier de création") justifying the feasibility of the ZAC and its programme, i.e. improvements to the physical and social environments etc., to which the facilities contribute. The second document i.e. the implementation report, ("dossier de réalisation") is a basic one as it offers the means of locating the integrated facilities. The reports are accompanied by diagrams illustrating the concrete location of housing and facilities. Finally, there are the planning documents ("documents de programmation") which lay down a timetable for the provision of the superstructural facilities and show its impact on the cost of the town planning operation. The ZAC documents therefore make it perfectly possible to approach the integration of facilities at a more operational level than the POS.

64. To draw up the ZAC documents it is necessary, under current regulations, to convene an inter-service conference attended by representatives from the various administrative services at Département level concerned by the ZAC (Département services of the public works, youth and sports ministries, the regional inspector of education, the treasurer etc.). This conference may offer a suitable forum for concertation. It is incidentally recommended in a circular of 1970 concerned with public facilities in ZACs to ensure "the maximum coherence in the planning of facilities".

65. In fact, the final possibility which the ZAC procedure offers as regards facilities integration is the 1970 circular. This includes, in the form of annexes, a list of the educational sports, socio-educational, sanitary and social facilities required for a ZAC with under 5 000 housing units. But its importance mainly lies in the objectives put forward i.e. the co-ordination and synchronisation of the funds and of the provision of the facilities in order to enhance the services rendered to users, build the facilities at a lower cost and ensure that the mayor is dealing with a single authority i.e. the Préfet of the Département in the case of facilities for which decisions are taken at the level of the Département. The objectives of this circular also concern the best possible use of facilities by integrating them and making them multi-purpose. These two objectives have to be considered in the physical planning of community facilities. Lastly, the circular is a step towards the synchronisation of finance, due to a specific budgetary chapter for the provision of facilities required for a ZAC of under 5 000 housing units, as listed in its annexes. These financial appropriations consist of global sums paid by the Préfet of the Département (or his authorising official) as the programme laid down under the ZAC agreement gets under way.

Tentative Conclusion

66. Although it has been necessary, in planning integrated facilities, to invent certain co-ordination procedures, devise a number of important inputs, face up to the difficulties which are inherent in the French political and administrative system, it is nevertheless a fact that the regulations appear stringent only because there is a blatant lack of information, particularly as regards financing, and that any facilities dossier which is cogently argued and defended has a good chance of being approved. If this were not so, there would not be as many community facilities in old buildings which by their very nature do not comply with norms e.g. libraries in disaffected chapels, social centres in old farms, youth centres in former mansions, etc. In conclusion, POS and ZAC procedures, although embodied in regulations, are far from being fully utilised particularly where community facilities are concerned.

Part Three
SOME QUESTIONS

67. It cannot be claimed that the information outlined above is exhaustive and covers the whole problem. If the analysis is to be pursued and completed a series of questions still remains to be answered. These questions are at three different levels and range from the most specific to the most general issues. For example: what kind of balance sheet can be drawn up regarding known projects and how is the integration of facilities proceeding? What developments in French society paved the way for the emergence of integrated facilities in the period 1965-70? Or can their emergence be explained by an historical analysis of the social significance of community facilities.

BALANCE SHEET

68. The balance sheet in respect of known projects of integrated facilities will be drawn up in the form of a series of questions on apparent advantages and disadvantages.

Advantages and virtue of integrated facilities

69. It is undeniable that the main virtue of integrated facilities is that they have helped to challenge traditional practices in the planning of communal facilities. They have called in question existing norms by drawing attention to the inadequacy and unsuitability of conventional facilities which have been replaced, as already seen, by new units or functional sets. They have also challenged the tenor of the activities assumed by the facilities, particularly in the cultural and educational field and which has been corrected by co-ordinating the behaviour of the various institutions. Finally, they have called in question the practices of the various agents concerned at different times in the planning of facilities as well as the French politico-administrative system (centralisation, administrative compartmentation, exercise of tutelage over the municipalities).

70. It is also conceivable that the integrated facilities offer a solution which is more flexible and more suited to differing local situations: type of urban fabric, abundance or shortage of community facilities, socio-cultural make-up of the population, size of town, etc. Thus, the Centre éducatif et culturel at Yerres is essentially geared to culture and leisure activities in a dormitory suburb of the Paris area which is under-equipped culturally. At Istres, an area undergoing far-reaching economic changes (the industrial zone of Fos), the Centre is primarily geared to vocational training and information. From the user's standpoint, the concentration of facilities may appear more rational. Activities which were previously scattered have now been brought together. This may well cut down the time spent in travelling and improve the efficiency and scope of the services rendered. Furthermore, the integration of facilities offers a new way of incorporating facilities into the urban fabric and has widened the scope of the discussions to include the whole range of urban development problems, i.e. integration with housing, the street network, green areas or proximity to other urban functions (public transport, shopping, activity zones, etc.).

Disadvantages

71. Are integrated facilities really a means of vitalising urban and social life as announced in the objectives? The assumption which has prompted the attempt to bring educational and socio-cultural facilities together is that the "animation" potential inherent in each type of facility is increased and multiplied by grouping them until it becomes a powerful pole of attraction equivalent in some respects to the traditional town centres with their cafés, shopping districts and leisure facilities. What has been forgotten is that (public) educational and socio-educational facilities are not "stimulating" in the same sense as a (private) store, cinema and café, and this is borne out by experience. Admittedly these public socio-cultural and educational facilities may be intensely frequented as is demonstrated by certain frequentation surveys but it is an illusion to imagine that the grouping of public communal facilities can replace a convergence of factors conducive to animated urban life. Moreover, as certain projects have shown, it would seem that instead of increasing animation the grouping of facilities produces contrary effects and creates nothing short of a cultural and socio-educational ghetto, segregated from the places where people live and work and from the whole urban fabric.

72. The importance of the school in the various projects has already been emphasised. But even if the school is really "open" the predominant share it takes in each operation in terms of funds, floor areas

and staffing determines the type of facility, i.e. it remains an educational facility to which other but secondary activities have been added. It is therefore not absolutely certain that some adults would not feel rather reluctant to "go back to school" even if only to borrow a book from the library or engage in some manual activity.

73. In the actual operation of the integrated facilities there has also been wide discussion on co-ordination and concerted "animation" aimed at joint objectives. This assumes a unity in the style of animation which is necessarily directed to a given social group because it is capable of responding to it. In these circumstances, can it be said that concerted animation allows other forms of animation to develop so that other social groups are able to express themselves? Certain conflicts seem to prove that several forms of animation cannot coexist in the context of an integrated operation. What is the attitude of the user in this context? To what extent can he participate in the collective management of complex regulations? Is he competent to do so? How can he appropriate multi-purpose accommodation? How will it be possible to initiate spontaneous activities in the context of an integrated operation? It must be made clear that these points of criticism are in no way intended to challenge the idea of integrated facilities but merely aim at lighting the way to future operations.

Current Trends

74. What can be said about existing projects or developments now proceeding? Are they as dormant as the interministerial committee? Was the generosity of the promotors of integrated facilities utopian? What analysis can be made of this venture in the labyrinth of the French administrative system, of the behaviour of all kinds of educators and "animateurs", and of the attitude of the administrative services which have been involved in such projects? There is in fact a wide range of attitudes from the most affirmed optimism on the one hand to strict compliance with regulations on the other. Is it not a fact that planning the innovation finally led to its demise and that the "recuperation" has been exemplary to the absurd? The fact is that apart from the initial projects, all the planned projects of any size have gradually been overtaken by such a rising tide of obstacles that they have lost their original character. An increasing number of municipalities appear to be trying to practice integration under some other name ("sans label") often on a small scale and sometimes even without any explicit reference to it, by confining themselves to schemes which can be handled by a small team and do not call for inputs out of proportion to the current norms and by realising that the decisive factor is the

place and degree of openness of the educational facilities.

75. Some idea of what a positive integration process can represent at the present time may be obtained from an experience conducted by a municipality in a suburb of Lyon (Saint Fons). The operation consists in developing three projects which differ in nature but which are all of manageable size. The initiative rests on a dynamic municipality which constantly modifies its strategy in the light of the experience gained and is prepared to change its own organisation in the light of the "animation" and problems encountered. The first of the facilities consists of a socio-educational centre for early childhood, a nursery and primary school and a centre for children ("maison de l'enfance"). The second is composed of a nursery school and a social centre and the third of a COSEC(1) together with social facilities. An analysis of the difficulties encountered shows that although design and building problems can be overcome at the cost however of considerable intellectual and relational input, the main blockages are linked to questions of the status of establishments, the modes of operation and methods of animation, and the attitude of the different users (teachers, "animateurs", etc.) who accept but often reluctantly to challenge traditional practices. It has also become clear that only a very pragmatic approach is realistic, that time is a decisive factor and that continuous stimulation on the part of those responsible at local level is necessary to explain, co-ordinate, facilitate and, where required, take firm decisions and push them through. Lastly, it emerges that since integrated facilities have a higher rate of activity than traditional facilities the operational budget is higher and must be planned as part of an explicit municipal policy even if additional funds can be obtained from the State. Moreover, even if the integration of facilities is a matter which must be worked out at local level it is perfectly conceivable that the central level assumes an information and supportive function.

PROBLEMS OF SOCIAL CHANGE

76. Although integrated facilities projects differ slightly from one town to another it will be noted that in all cases they involve changes at local level. They are at the root of economic, social and urban problems. These local changes are symptomatic of the overall social changes now occurring in society.

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1)"Complexe sportif évolutif couvert" = an evolutionary covered sports complex.

Large Scale Changes and Failures to Adapt

77. It is commonplace that industrial societies have undergone large-scale changes in the last ten years. These have entailed difficulties of all kinds. The main feature of all these economic and social problems is the acceleration of the disintegration they cause. One may recall the changes which have effected industry and the rapid spread of conurbations which the authorities have tried to check since the Vth and VIth Plans. The failure of different institutions to adapt to these new situations will also be recalled i.e. failure of the educational system which educates children once and for all whereas the evolution of the economic system calls for adults who are capable of perpetually up-dating their knowledge and proficiency. There is also the failure of certain cultural institutions which disseminate a single conception of culture and the failure of existing forms of social assistance at a period in which the number of deviants, delinquents and misfits is steadily growing.

Social Strains

78. Apart from the failure of institutions to adapt, social strains are observable in many sectors: the increase in commuting time due to the ever-increasing distance between home and workplace; the endemic unemployment among young people; the increase in delinquency or concealed forms of social maladjustment among young people; drug-taking and other addictions; the social segregation of immigrant workers and the more explicit segregation of certain social categories in specialised institutions outside urban areas (pensioners, maladjusted persons and those classified as mentally sick); and social segregation in terms of housing with a sharp separation between rich and poor neighbourhoods. To round off this picture we need simply mention the changes which have taken place in certain socio-professional groups: the change in the status of women; the devaluation of certain professions (architects, teachers); the absence of any status for certain other professions, often new ones ("animateurs", educators, social psychologists, etc.).

Integrated Facilities: A Tentative Reply?

79. Have integrated projects not been a tentative reply to acute local problems? In the new towns it was the acuteness of the problems of urban vitalisation which in the absence of any social basis lead to the establishment of integrated facilities as centres of social life. The vital problem of providing for a new population and its vocational training was the

reason for Istres (close to the industrial and port complex of Fos-sur-mer). The Quiberon project was due to the steady drain of young people coupled with the absence of vocational training. At Grenoble the community facilities were provided because an awareness among the more educated social classes (the "middle classes") of the problems of social segregation and of the inequality of opportunity between different social categories in the matter of education and culture.

IMPLICATIONS OF INTEGRATED FACILITIES

80. At this point some of the conclusions of CERFI(1) may be summarised for they permit to situate integrated facilities in relation to an historical analysis of communal facilities. During the earliest phase, most of the scanty facilities were provided by private institutions, often of a religious nature but in the 19th century efforts were made to remove certain facilities from religious influence (libraries and workers' universities). This counter-movement was of little consequence in France. A second "administrative - functional" phase which is still under way, developed in the 19th century around a number of specific problems (hospitals, public instruction) and gathered considerable momentum after the second world war. It is the result of an effort by the State to reassert its authority; through its centralised administration it supervises the provision of facilities after having codified needs, laid down norms and decided on locations. Within this major phase, which is still underway, attention should be drawn to three recent trends despite their minor importance.

81. The first trend has led to the integration of facilities. It is based on a judicious criticism of existing facilities and proposes the combination of various communal facilities in the same architectual complex in order to increase the range of services they can provide. This development may today be interpreted in various ways. In particular, it might be argued that it is the most blatant expression of the take-over by the State of these facilities in as much as it might well result in facilities which are particularly cumbersome and complex to manage, and also lead to a hyper-functionalist policy under which a standard type of facility centralising all the services offered to the public might be devised for every environmental unit (neighbourhood, district or housing estate, etc.).

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1) Centre d'études, de recherches et de formation institutionnelles, publishing the magazine Recherches.

82. Another trend lays emphasis on integrating facilities with other urban elements rather than among themselves. This trend is due not so much to thoughts about the facilities themselves as to new views on urban planning. Precedence is given to the town as a whole and it is in relation to this comprehensive entity that facilities must be conceived and located. The facilities may be integrated or dispersed if it proves desirable to split up certain major facilities in order to vitalise, serve or irrigate the whole urban fabric more effectively.

83. A third trend is to de-specialise communal facilities in order to encourage their appropriation by the public through random uses varying over time. The Meerpal at Dronten was the prototype of such a facility. How does this multi-purpose architecture now stand as far as the co-existence of different social groups is concerned? Must it not be recognised that it leads either to an under-utilisation of the facility or to conflicts which are sometimes insoluble.

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CENTRE EDUCATIF ET CULTUREL D'ISTRES

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NOTE

The case study on the Centre éducatif et culturel (CEC) of Istres was carried out from May to December 1975, with an intensive phase of on-the-spot observation in June of that year. Since then, the operation of the CEC, and even its physical structure, has been marked by rapid change, characteristic of this type of project.

In addition, the draft report on the CEC was submitted to the designers and those in charge of the project on the occasion of a visit in December 1975 and was subsequently amended to take their views into account. The final text which was circulated to participants at the Skokloster Symposium on School and Community Building in relation to Urban Dynamics in turn gave rise to further comments and requests for amendments.

The present text thus represents a revised version of the report presented at Skokloster and the modifications made are as follows:

- the data gathered at the time of the observation (June 1975) have been up-dated and the corresponding remarks have been changed accordingly;
- supplementary information reflecting the evolution of the CEC since the time of the case study and some changes of interpretation suggested by the management of the Centre have been incorporated in footnotes.

Jean Biaugeaud

Part One
PROJECT BACKROUND AND DEVELOPMENT

CONTEXT

Basic Data

1. The socio-economic context of the Centre éducatif et culturel (CEC) of Istres is one of profound change. The population of Istres, an old semi-rural township on the western shores of the Etang de Berre, caught up in the process of industrial and urban development in the Fos-Etang de Berre region, is increasing steeply. It was 13 404 in 1968, is now 21 070 (1976) and is expected to be 54 000 by 1986.(1)

2. Economic development in the Fos-Etang de Berre region has brought about radical changes in the pattern of employment, the main features being as follows:

- the number of jobs on building sites, which had been increasing steeply up to 1973, has since begun to decline; to fill them, heavy calls had to be made on foreign labour;
- permanent jobs are split almost equally between basic industrial and skilled jobs, the greater increase being in the latter; in this case the manpower has come from elsewhere in France (Lorraine and Savoie);
- low-skilled manpower (semi-skilled workers and labourers) accounts for about half the workforce in the new industrial plant;
- manpower is essentially male (there is unemployment among women).

3. The new jobs that are being created have made a large-scale urbanisation programme necessary as part of the development of the new town of Fos-Etang de Berre. With this in mind, the authorities have taken steps to reserve two kinds of zone for building purposes: deferred

1) D. Cultiaux, "L'aménagement de la région Fos-Etang de Berre", La Documentation française, Paris, 1975.

Plan 1

SITUATION OF CEC IN THE URBAN DEVELOPMENT OF ISTRES FROM 1970 TO 1975
AND IN THE URBAN DEVELOPMENT FORECAST FOR 1985

Map 1

URBAN DEVELOPMENT ON 1/1/1971

Map 2

URBAN DEVELOPMENT ON 1/1/1975

Map 3

URBAN DEVELOPMENT FORECAST FOR 1985

development zones (zones d'aménagement différé - ZAD)(1) and concerted development zones (zones d'aménagement concerté - ZAC). Whilst the studies for the VIth Plan called for a connection between existing built-up areas and new districts (in Istres in particular) it has to be admitted that present urban development does not yet meet this criterion and that the CEC suffers from a certain measure of isolation since it is located between the old town and the concerted development zones of Rassuen and Les Quatre Vents (see Plan 1).

4. Demographic growth has changed the traditional population pattern. During the case study, it was noted that most of the informants referred to four types of group: the "Istrinques" born in Istres, the "Istréens" who had lived there for some considerable time, the "immigrés" (workers coming from other countries) and the "importés", who had come from other parts of France and, in particular, Lorraine. There is no doubt that this changing pattern has major implications in terms of the idea people form of the CEC and the extent to which they use it.

5. Another point noted in the course of the study is the major influence exerted in Istres old town by the "societies" (friendly societies, war veterans' association, bullfighting club, tourist office, majorettes, etc.); many of these activities enjoy unquestionable popularity among the local population. This presents major problems as regards the relationships and balance between the activities of the CEC and those of these societies.

History of Project

6. The main milestones in the history of the project are these:

1965-68	: purchase of land (reservations)
1969	: visit by the municipality to the Centre éducatif et culturel of Yerres (first integrated facility in France).
1969	: Study by OREAM(2), Marseille, of needs of public facilities.
July 1969	: The lower secondary school (Collège d'enseignement secondaire - CES) is included in the Ministry of Education programme and budget for 1970.

1) In these zones, preferential purchasing rights are reserved for a public entity (the State, a local community, a public service, etc.).

2) OREAM = Organisation d'études d'aménagement de l'aire métropolitaine - quasi-public bodies responsible for long-term studies on the development of the metropolitan areas defined in 1964 in the national development plan for land use.

December 1969-March 1970	: Study of overall project by AREA(1).
May 1970	: Approval of overall project proposals by the Préfet of the region and representatives of the ministries concerned (inter-ministerial committee).
June 1970	: Start of building work.
1st October 1970	: Opening of the CES.

7. The buildings were put up in the following order: restaurant (1971), art/craft workshops and leisure centre (1971 and 1972), sports centre (1971, 1972 and 1973), library (1972), indoor swimming pool (1973), reception building (1974-75), outdoor swimming pool (1975), theatre and annexes (1975-76).

8. Other important dates in the development of the project are:

Spring 1971	: municipal elections, change of municipal government;
October 1971	: appointment of the director of the integrated centre(2);
1974	: change in the brief for the cultural centre; the plan to have a single theatre in the CEC is changed into a proposal in two parts: one theatre in the CEC plus the restoration of the Théâtre de l'Olivier (formerly the casino) in the old town.

Institutional Aspects

9. The Istres CEC is one of the first examples of integrated facilities in France (later in date than the Centre éducatif et culturel of Yerres and contemporary with the Villeneuve facilities in Grenoble). As such it follows on recent measures which aim at giving broader access to facilities (sports centres open to school and non-school publics) and making them multi-purpose, and also the trend in favour of "the open school" reinforced by developments since the May 1968 events. The setting up and

1) AREA = Atelier de recherche sur les équipements et l'animation, Paris - a private consulting firm specialising in the planning of facilities.

2) Headmaster put at the disposal of the integrated centre by the Ministry of Education; also responsible for running the CES.

operation of the CEC meant coming to grips with the complex structures of French administration:

> Finance and facilities planning come directly under the Préfet of the region who is given an allocation by each ministry (at central level)separately for each type of facility. He decides on the facilities that are to be set up in the light of the various national policies and negotiations with the municipalities.
>
> Under the authority of the Préfets, the ministry offices at Département level are responsible for approving the drawings - each in its own field - and for supervising execution and expenditure. Some government departments, however, have no offices at Département level and in those cases supervision has to be exercised by the central authorities (as in the case of the Ministry of Culture and of the national offices such as the adult vocational training agency and the national employment office).
>
> Responsibility for financing and for commissioning the work varies with the type of facility. It is borne either by the local community (municipality or Département) or by central government, which exercises its responsibility through its decentralised offices at Département or regional level. In the case of standardised facilities (schools, sports centres, etc.) the responsibility lies with central government and any change in procedure or design requires action or agreement by the central authority.

10. The municipality - the level most directly concerned by such projects - is thus largely dependent on the regional and central levels of decision particularly since municipal budgets are relatively slender so that recourse has to be had to State subsidies (the amounts of which vary depending on the nature of the facility) and because of the lack of technical resources at municipal level. The real power of co-ordination in project planning lies with the Préfet of the region (who nonetheless has to comply with the general directives from each ministry). The development of the Istres project provides a clear illustration of how such a scheme depends upon agreement between regional and municipal authorities.

11. Co-ordination was helped by the following arrangements, the effectiveness of which, however, became apparent only after the project had got under way:

The institution, at national level, of an inter-ministerial commission for integrated facilities which had no power of decision but was responsible for studying general measures or measures specific to each government department which could help towards the materialisation of integrated projects.

Build-up of the institutions responsible for promoting the development of the new town of Fos-Etang de Berre:

- the inter-ministerial agency for the development of Fos-Etang de Berre (Mission interministérielle d'aménagement de Fos-Etang de Berre - MIAFEB), after producing a master plan for the new urban development scheme, was transformed into a public establishment for the development of the shores of the Etang de Berre (Etablissement public d'aménagement des rives de l'Etang de Berre - EPAREB which is responsible for decisions on urban planning problems and has local co-ordination and planning powers;
- the three municipalities concerned set up a community development syndicate (Syndicat communautaire d'aménagement - SCA), which took over municipal responsibilities and has its own specific technical and financial resources.

12. The three main agents involved in bringing the project into being were therefore: the municipal authorities (first the municipality and then the SCA), the regional authorities (Préfet of the region), and the "developers" (MIAFEB and later EPAREB). But the centralised structure of the French administrative system and the sectoral division of policies between central government departments result in direct intervention by their officials, regional offices being purely outposts of the central authority. In practice, the role of the "developers" has never been very marked.

13. In the operation of the CEC they cease in any case to be involved but could provide support to the development of the project through their research capacities. The influence of the municipal authority increases in certain sectors (sports, leisure centre, social centre) where its action is either reinforced by - or in competition with - the activity of the associations; conversely, its authority diminishes in all those sectors directly governed by centrally controlled administrative bodies (health, education).

MOTIVATIONS

14. The motivations that helped to bring the project to life were of various kinds and had various origins.

Diversity of Types of Motivation

15. The economic motivations are in themselves very varied: the difficulty of finding sites large enough and in the right locations, the concern to get maximum return from investment by more intensive utilisation or by avoiding duplication of facilities, or the concern to meet the increasing demands from institutions without having to increase the resources allocated in the same proportion.

16. Then there are motivations linked with the changes taking place in ideas on education and the new expectations they are arousing. Tendencies emerge at different levels requiring that education should form part of overall policies aimed at meeting a variety of mainly cultural and social needs and at opening up the school to the community.

17. Lastly there are the motivations linked with urban development and, more particularly, the objective of providing an underprivileged area with sufficient facilities at one and the same time, prior to the arrival of new residents.

Diversity of Origins of Motivations

18. The various motivations can be attributed to four types of agent who may be at either local or regional level (municipalities, regional administrations, "developers") or at national level or linked with the international context (ministries, experiences in other countries).

19. Analysing the motivations of the Istres municipality is difficult because the CEC project was affected by different strategies bound up with a political change in the local community. The present municipality's programme is based on rehabilitating the old town - symbolic value attaching to the renovation of the former casino (Théâtre de l'Olivier), dating back to 1920 - whereas the previous municipal council (which had visited the Centre éducatif et culturel of Yerres) was relying more on the new urbanisation zones for the overall development of the town, leaving Istres old town as it was. The role of the CEC was not the same in these two strategies: for the old municipality it was to be the pivot on which the cultural development of the whole of the commune would hinge, whereas for the present municipality this role was to be shared with the casino.

20. It is at this point that the second agent - the regional administration - came on the scene. Under the influence of a strong personality ("Chargé de mission" at the regional Préfecture and thoroughly familiar with the Yerres project), the regional administration pressed for facilities to be provided before the arrival of the new residents, facilities which in the meantime could be used and animated by the existing population. It gradually succeeded in convincing the new municipality of the value of the CEC and thus in promoting the idea of a co-ordination between two poles: the CEC and the casino. It was also necessary to broaden the conception that had prevailed at Yerres. Whilst retaining the options of multi-purpose facilities, of openness towards the community, and of integration of cultural and leisure activities - it seemed necessary to develop activities in the social field related to employment, old people and adult education. It is the integration of this dimension which is at present being tackled.

21. The "developers" (OREAM and MIAFEB) form the third group of agents at regional level. Their task consisted in drawing up a preliminary programme from a list of facilities based on theoretical population figures. These proposals were in no way to suggest that the CEC would meet all possible needs for facilities. The task was primarily to rationalise and translate into operational decisions the proposals of the various sectors interested in the project. In particular, they developed and promoted the idea of making the CEC an integral part of the urban development scheme by giving it preferential relationships with the future town centre.

22. As regards the motivations of external origin, mention should be made of the various ministries concerned (Ministries of Education, Health, Culture, Youth and Sport), and of the influences or pressures stemming from the national context (earlier experiences of integrated facilities in France, the May 1968 events) or from the international context (experiences of co-ordinated facilities in other countries).

23. Among these agents special mention should be made of the planning department of the Ministry of Education. In the minds of its representatives(1) the task was one of finding ways and means of opening up the school to the community. Note should be made here of the points of reference involved. Firstly, a number of similar experiences (Grenoble, Montreuil-Bellay, Chamonix, Yerres) provided a realistic basis for the project. Secondly, the impact of the May 1968 events was still being felt. The

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1) to which should be added some general inspectors for schools.

object, to use a phrase invented a little later by Mr. Schwartz, was to achieve "vertical integration" (continuity between actions directed towards various age groups in life) and "horizontal integration" (decompartmentation of the various types of actions for the one and the same age group). Another point worth noting is that the planning department also drew support from a tendency growing among educationists and teachers and reflecting the wish to find ways and means of "opening up the school" and breaking down its isolation. This line of thinking was advocated by ex-members of the youth movements as well as of educational movements. It was, it may be noted, taken into account in the guidelines of the VIth Plan.

24. To conclude, therefore, it will be seen that the driving force in the Istres CEC project stemmed from the interlocking of different types of motivation, of different origins (agents), all emanating from different sectors (the local community, the ministries, etc.).

OBJECTIVES

Foreseeable Needs

25. Initially there does not seem to have been any real study of the needs that the CEC might meet. The only needs identified were quantitative and planned on the basis of a theoretical list of facilities required for a given size of population. Neither these lists nor the ratios on which they are based give any clue as to what the potential population might expect from the facilities, or the activities and services the latter might offer.

General Objectives

26. The "Guide administratif" for the CEC(1) mentions two "basic objectives":

> "To improve the educational system in order, in particular, to facilitate entry into working life". This objective lays particular stress on the CEC's role in a policy of recurrent education and guidance linked with the socio-economic changes taking place in the region.

1) Centre éducatif et culturel du syndicat communautaire Fos-Istres-Miramas, Guide administratif, published by the Préfecture for the Provence-Côte d'Azur region and the Préfecture for the Bouches-du-Rhône Département, November 1973.

"To be an instrument for general stimulation enabling progress to be made towards recurrent education". The main reference here is to the development of cultural and leisure activities and the creation of opportunities for the population to take charge of its own development.

27. In order to attain these general objectives, this co-ordination project set itself the following specific objectives:

- providing for multi-purpose and maximum use of the facilities
- opening up the school
- resisting any and every form of compartmentation
- becoming a centre for recurrent education
- forging a relationship between old and new populations
- acting as an instrument of social aid for the most disadvantaged.

Sectoral Objectives and their Co-ordination

28. Each institution or service has its own specific objectives. The following list is confined to the main ones:

CES(1): general personality training, openness towards the community, initiation to working on one's own and to community life, combatting segregation and socio-cultural handicaps.

Leisure centre: promotion of encounter (between different age groups, socio-economic categories, associations and old and new populations) and of self-expression activities, dissemination of culture and understanding of the various languages of art, role of relay point in the reception at the CEC.

Inter-municipal recurrent education centre: adult education and information for adults, training of instructors, facilitating entry into working life for young people looking for employment.

Inter-municipal sports centre: promotion of sports activities for children and adults, and organisation of sports events.

Library: promotion of reading, supporting role for education, documentation centre for the other institutions.

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1) Collège d'enseignement secondaire.

Open-air centre: looking after children (nursery, educative leisure activities, sports activities), and training of instructors.

Social centre: CEC reception service, help for users with integration problems, social welfare services.

29. There are, of course, numerous points at which these objectives interrelate. Apart from the daily opportunities for encounter in co-ordinated facilities, the co-ordination of these objectives is ensured by regular co-ordination meetings between the various institutions.

Evolution of Needs and Objectives

30. Gradually, as the CEC began to take shape, those responsible for bringing it into being perceived a certain number of needs. Briefly (a detailed description is given in Part Five) these needs included: those stemming from integration itself (the need for co-ordination and for meetings), those related to the characteristics of the changes in the structure of the local population (newcomers, development of new housing settlements, unemployment among women, old people, local associations).

31. The objectives assigned to the CEC do not appear to have changed appreciably since the start of the project. Those responsible for the various facilities clearly perceive their own specific objectives but as regards the co-ordination of these specific objectives with the general objectives of the CEC, most of them would appear not to be concerned or else experience some difficulty in visualising it in concrete terms.

Part Two
PLANNING AND DESIGN METHODS

OVERALL PLANNING

32. Overall (or macro-) planning began towards the end of 1969 and continued up to 1973 and even beyond (the content of the project was changed and the relationships between the project and the urban development foreseen were not defined until very late).

General Description of the Planning Process

33. In France, investment in community facilities is determined by national sectoral programmes (each ministerial department responsible for a given sector decides for itself how its investments are to be distributed and according to what norms) and therefore the first stage of a local inter-sectoral project consists in drawing up a list of the facilities of which the project will be made up (standard list of facilities). The negotiation for this list partly involves three levels of decision-making: national, local and regional, the latter playing a particularly important role in the case of the Istres CEC.

34. Producing the list involved:

- administrative work (compiling of dossiers, study of implications of co-ordination) in order to draw up a timetable for implementation and to schedule financing decisions;
- technical work (study of the way the Centre was to be fitted into the urban context and what its internal composition was to be); the first urban planning exercise, carried out by the development agency, was insufficiently detailed to serve as a satisfactory guide for the second, as would have been logical.

35. The study on the internal composition of the Centre was entrusted to a pluridisciplinary team based in Paris (Atelier de recherche sur les équipements et l'animation - AREA), which developed proposals for the overall project. These were discussed and then approved by the various ministries in the inter-ministerial group for integrated facilities (which became an inter-ministerial commission in 1971). In this study each facility on the standard list was broken down according to functions and a grouping of functions and a network of relationships between them was then proposed as a basis for the internal composition of the Centre (see Table 1). These proposals were, in addition, adjusted to suit the site (the natural site and the projected urban site (Figures 1, 2 and 3).

36. The design architects (Messrs. Riboulet, Thurnauer and Veret) worked out the master plan for the whole complex which defines a general rule applicable to the programme as a whole and to the site rather than a visual presentation of the buildings. This master plan was approved by the Préfet of the region in June 1970. A more detailed description will now be made of the various phases outlined above.

Standard List of Facilities

37. At the end of 1969 the following twelve facilities were on this list:

i)	Collège d'enseignement secondaire (CES) 1 200 pupils	9 000 m^2
ii)	Leisure centre	1 200 m^2
iii)	Young workers' hostel - 30 beds	
iv)	Holiday camp - 200 beds	
v)	Public library	1 200 m^2
vi)	Social centre	450 m^2
vii)	Health centre	800 m^2
viii)	Museum of technology	-
ix)	Gymnasium	1 000 m^2
x)	Indoor and outdoor swimming pools	2 000 m^2
xi)	Outdoor sports facilities: 3 playing grounds and 1 stadium	
xii)	Open-air theatre	

38. The following steps were involved in drawing up the list:

An analysis of the lack of community facilities in the municipality of Istres; what existed was compared with the facilities that should normally be provided in the area. This latter norm was taken from

the "standard list of facilities" [summary of the principles of the Vth French Development Plan (1966-70) for making community facilities match population forecasts taking into account urban development].

Consultation at regional level with the various heads of services in order to decide which components of the regional facilities programmes of the various ministries (e.g. Education, Youth and Sport, Health, etc.) were to be sited at Istres. This consultation was led by a Chargé de mission in the office of the Préfet of the region who personally took up the cudgels for the project and succeeded in having its priority nature recognised in the framework of the regional development plan.

Negotiation between the various levels, national (ministries), regional (Préfet of the region, heads of services) and local (political municipality; technical - the developers: MIAFEB followed by EPAREB) in order to establish which parts of the programme were not governed by norms (e.g. museum, holiday camp) or to adapt existing norms to suit the situation at Istres.

39. The modifications made to the initial list of facilities were as follows:

The stressing of certain of the project's social objectives linked with the industrial development in the Etang de Berre area (Fos); which meant adding supplementary facilities: employment office, psycho-technical centre of the adult vocational training agency, guidance and information centre, and nursery. But this change went more in the direction of increasing social services rather than developing actions in the social field. The young workers' hostel, for example, was crossed off the list.

Changes in the national programmes of the ministries involved in the project. After 1970, for example, the Department for Youth, Sport and Leisure (formerly Ministry for Youth and Sport) developed its scheme for indoor, evolutionary sports complexes (standard sets of differentiated facilities that could be planned as a unit but built in phases); this appreciably stepped up the proportion of sports facilities in the project. The Ministry of Culture had also finalised its programme of cultural centres and the theatre planned as part of the leisure centre then became an additional element of the project.

Ups and downs in financial availabilities. No way was found to finance the museum, for example, and this therefore dropped out of the programme, its place being taken by the continuous training and social advancement centre(1) for which unexpected finance became available.

Changes in local policy as regards the location of the facilities in the community. The cultural centre, included in the programme at a fairly late stage, was split up: the capacity of the planned CEC theatre was reduced from 700 to 300 seats to allow the provision of a second pole of facilities in the old town at the Théâtre de l'Olivier (the former casino).

The generation of a dynamics of co-ordination (or concentration) as if the planned complex were attracting new facilities either to supplement the existing ones(2) (e.g. the nursery) or to take advantage of the possibilities offered by those already planned (e.g. the guidance and information centre, the medico-psycho-pedagogical centre).

Preparation of the Master Plan

i) Functional analysis (Table 1)

40. The basic hypothesis was that each facility included in the programme had to satisfy several functions that needed to be distinguished. These functions are defined at one and the same time by:

- the specific vocation of each facility with a known function (CES, leisure centre, sports centre, etc.);
- the general objectives of the project (enlarging the framework of the known functions);
- the various publics catered for by the project, i.e. the Istres population (the people already there plus the new residents); people on holiday attracted by the holiday camp, the outdoor swimming pool and more generally the recreational nature of the site; adults under training, some of whom will be temporary residents; and lastly the young people, pupils and young workers, the most direct users of the CEC(3).

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1) Facility corresponding to the recurrent education centre.

2) Some existing facilities have also been extended beyond what was originally envisaged: an additional workshop for the CES; a social area for the leisure centre (under construction); additional accommodation for the recurrent education centre (scheduled for 1977).

3) The young workers will not now be housed in the CEC itself because the hostel originally planned to provide them with accommodation on the spot was dropped from the project.

Table 1

BREAKDOWN OF FACILITIES ACCORDING TO FUNCTIONS

CES

1. Staff housing
2. Restaurant
3. Meetings; small and large groups
4. Study in specially equipped facilities
5. Art/Craft workshops
6. Documentation, self-instruction
7. Relaxation, encounter, exhibition, self-expression.
8. Administration (closed)
9. Reception
10. Administration (open)
11. Health
12. Educational consultation
13. Slow learners and psycho-pedagogical facilities

LEISURE CENTRE

14. Reception
15. Administration
16. Art/Craft Workshops
17. Meetings, public performances: 350 places
18. Meetings; small and medium groups
19. Consultation, "animation"
20. Relaxation, encounter, exhibition, self-expression
21. Games

YOUNG WORKERS' HOSTEL (30 beds)

22. Staff housing
23. Bedrooms
24. Restaurant
25. Encounter, relaxation, leisure
26. Medical room
27. Library, documentation
28. Administration
29. Meetings

HOLIDAY CAMP

30. Accommodation
31. Restaurant
32. Reception
33. Administration
34. Meetings
35. Relaxation, encounter
36. Large meetings

LIBRARY

37. Exhibition
38. Distribution (discothèque)
39. Documentation service
40. Reading
41. Self-instruction
42. Reception
43. Administration
44. Storage, upkeep

SOCIAL CENTRE

45. Reception
46. On-duty service
47. Consultation, "animation"
48. Meetings
49. Nursery
50. Staff housing (1 or 2)
51. Practical activities

HEALTH CENTRE

52. Reception
53. Consultation
54. Care
55. Administration
56. On-duty service

MUSEUM

57. Reception
58. Administration
59. Storage, upkeep
60. Exhibition
61. Discovery activities
62. Research
63. Documentation

GYMNASIUM/SPORTS HALL

64. Training
65. Public performances
66. Medical check-ups

SWIMMING POOLS

67. Training
68. Public performances

OUTDOOR AREAS

69. Physical training
70. Relaxation, encounter
71. Games

OPEN AIR THEATRE

72. Public performances
73. Relaxation, leisure, encounter

GROUPINGS IN FUNCTIONAL SETS

1. ADMINISTRATION INITIAL RECEPTION	CES (including educational consultation) Leisure centre Young workers' hostel Holiday camp Library/documentation Museum Sports facilities Social centre Health Centre
2. EDUCATION	CES (general and specialised classes)
3. ART/CRAFT WORKSHOPS	CES (including art and music rooms)
4. RESTAURANT	CES Young workers' hostel Holiday camp
5. LIBRARY DOCUMENTATION CENTRE	Library CES Young Workers' hostel Leisure centre Museum
6. CONSULTATION, GUIDANCE AND ADVICE CENTRE	CES Social centre Health centre
7. PLACES OF ENCOUNTER, MEETINGS, RELAXATION AND PUBLIC PERFORMANCES	CES (social area) Young workers' hostel (social area) Leisure centre Holiday camp Gymnasium/sports hall Swimming pools Open-air theatre
8. HOUSING	CES (except caretakers) Young workers' hostel Museum Holiday camp (staff housing)
9. MUSEUM	Museum
10. SPORTS	Gymnasium/sports hall Swimming pools Outdoor areas

41. The term "function" covers both:

- the general type of need the facility is intended to meet or the general type of activity it allows;
- the material support for the activities, in other words the subset of corresponding facilities without, however, their nature being specified.

42. The result of the functional analysis was a list of 73 items (Table 1). The general functions assigned to the various facilities makes a higher total than those assigned to them when constructed separately. This is particularly true of the CES. The functions that occur most often are precisely those linked with the openness and social mixing objectives (reception, encounter, relaxation).

ii) Definition of links between functions

43. Each of the 73 functional items that were established was related to each of the others and the 2 628 links produced by this combination were plotted in a "cross-tabulation matrix" (symmetrical, double-entry table).

44. The main hypothesis concerning these links is that those items which correspond to supplementary functions must have more or less strong links(1) to bring about the desired functioning of the complex. Applying this hypothesis is a matter of teamwork; the pluridisciplinary nature of this team, its experience and its close adhesion to the project's general objectives can be regarded as sufficient guarantee of the validity of the procedure. Whilst not given any precise formulation, the criteria used relate to three considerations:

- the links between the functions must provide a crossover from one type of activity to another; each activity thus constitutes a "point of entry" into the co-ordinated complex through which users should easily be able to find the others;
- the groupings and links must help to economise resources and improve efficiency; it is hoped, by concentrating resources usually dispersed over various facilities, to give more substance and more variety to the facilities which will each assume given functions for the whole of the Centre;

1) This term - more intuitive than objective - has been made more precise in later studies based on this method.

- these groupings and links must contribute towards co-operation, consultation and exchange of information.

45. The links between these functional items are expressed purely in terms of spatial relations (closeness and ease of access). Four levels were defined: no link, weak link, strong link, merging (when the different items are merged into one).

iii) Grouping by functional sets

46. The study of these links enabled ten functional sets to be defined grouping the items produced by the analysis. The principle of their make-up is that, for each type of function, a single set of facilities is proposed - generally made up of items it seemed desirable to merge. But this was the principle and its application proved to be more elusive. The point is that a set has a dominant function but necessarily participates in others. The "reception" function and the "relaxation-encounter" function were only partly concentrated in specific sets of facilities and also had to be dispersed in others. The important thing was that the sets proposed should be different from the facilities included in the list; their specificity stems from the function they perform in the project as a whole and not from the sector to which they belong in theory or from the type of public they cater for.

47. The "cross-tabulation matrix" also enables the desired network of links between the ten functional sets to be defined. This network is shown in Figure 1. It will be noted that the two sets having the strongest and most numerous links are "education" and "relaxation-encounter-meetings-public performances", which explains their central position in the layout of the scheme.

Site Analysis

48. In designing the Centre, great importance was attached to the natural site. At the early stages of study of the project, this site - which is now very congested - was completely empty, which underlined its exceptional characteristics and presented the designers with a responsibility as to the way the environment should be treated. Figure 2 shows the four major features of the site: the cliff, the hill, the pine forest that it was vital to conserve, and the opening to the west towards the future town centre.

49. A theoretical location was allocated to each of the ten functional sets with reference to these four features, on the basis of the mutual

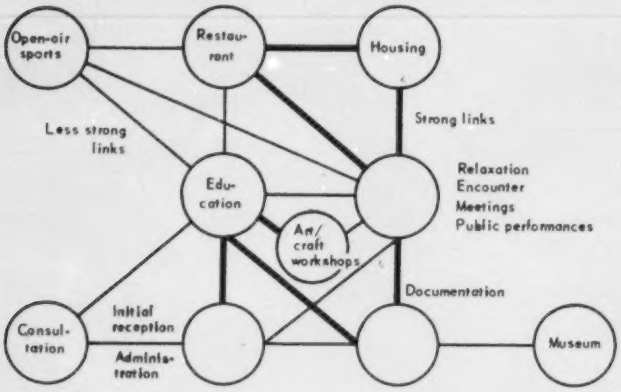


Figure 1
LINKS BETWEEN FUNCTIONAL SETS
(without spatial significance)

Figure 2
THEORETICAL LOCATIONS ON SITE OF THE FUNCTIONAL SETS

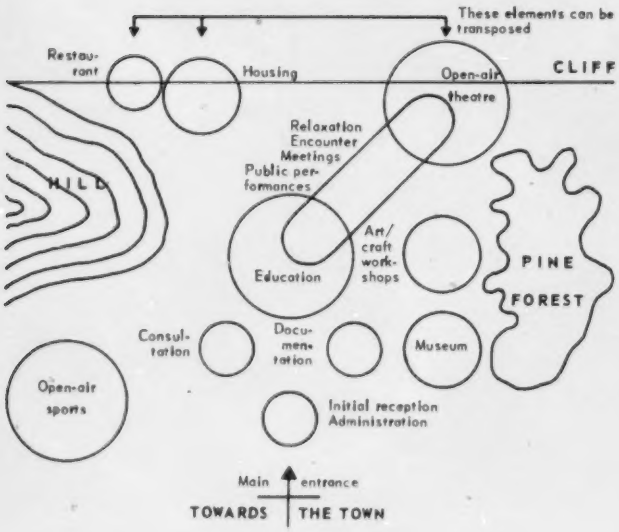


Figure 3
GENERAL LAYOUT (Basis of Master Plan)

compatibility between the type of operation foreseen for each of these sets and the characteristics of its immediate environment. Some of these locations were determined by objective necessity (e.g. open-air sports in the only area with sufficient free space), the findings of the functional analysis (reception, consultation, public library and museum towards the town), or deliberate choice (holiday camp, housing and restaurant on the cliff).

Elaboration of the Master Plan

50. Figure 3 shows that the master plan is primarily the result of combining the links between functional sets (Figure 1) with the desirable locations on site (Figure 2).

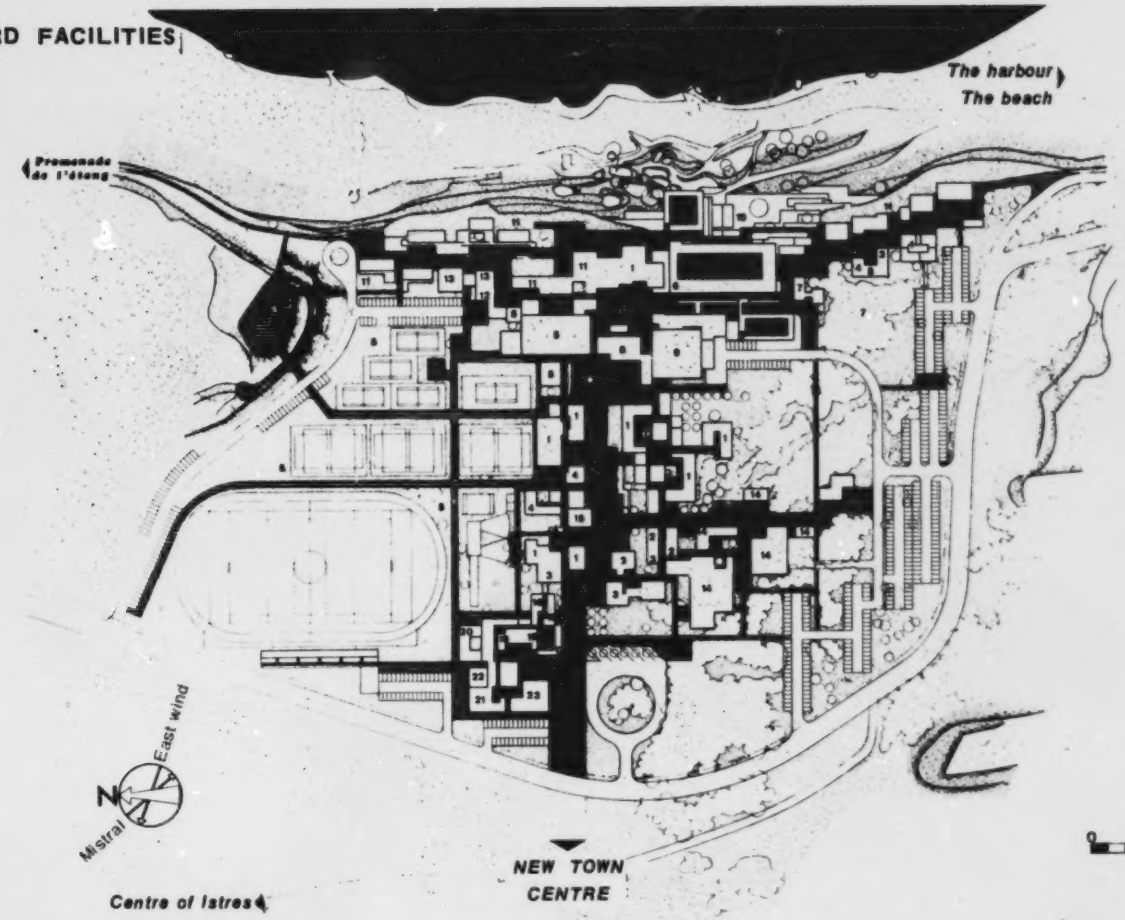
51. This general master plan was, at this stage, still only a sketch plan which required a considerable amount of further work. The "relaxation-encounter-meetings-public performances" function, for instance, includes various elements some of which involve important building works and/or fairly considerable autonomy in operation (swimming pools, indoor sports facilities, theatre). However, the principle adopted was to give precedence to the common function of these elements (social exchange and public performances) over their specific function. The purpose was to foster the "animative" power of the corresponding facilities in the Centre. This explains their central position in the general layout. Even so, the massive and generally enclosed nature of facilities of this kind was not easy to reconcile with their "animative" role within the complex as a whole.

52. The final general layout (master plan) was arrived at by applying the following six principles:

Openness. The CEC is designed to be open, linked to its present and future environment. Access can be had to it anywhere on its periphery. Walkways for pedestrians link it to the main spaces and districts surrounding it. Points of access for motor vehicles are kept away around the outside of the site.

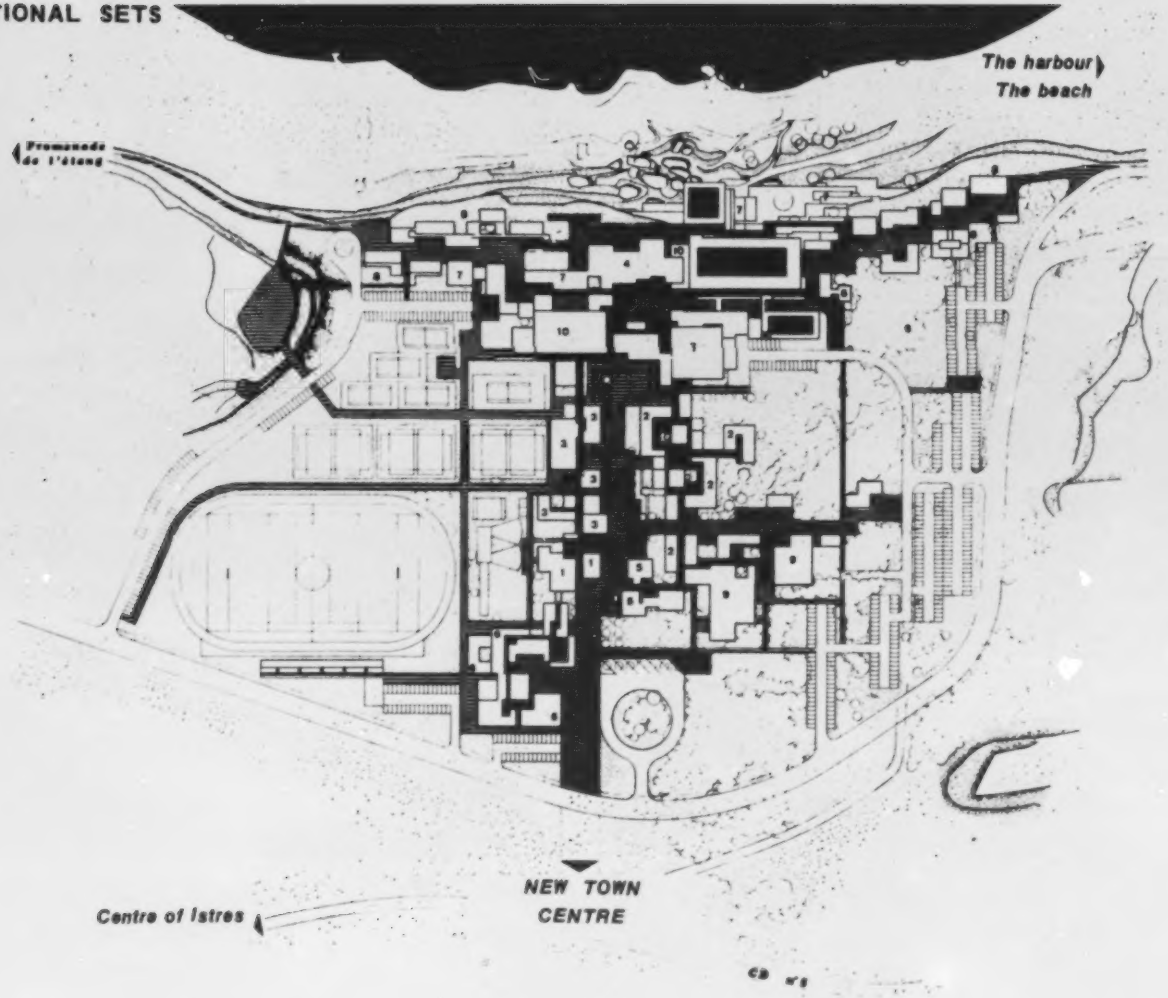
Perpendicular axes. The spatial organisation hinges on two main axes: one parallel to the edge of the cliff with an unimpeded view towards the Etang de Berre, and the other - at right angles to the cliff - constituting the main links with the future town centre. The most animated areas (public performances, restaurant, swimming pools, etc.) are located where these two axes cross. Bounded by buildings, these axes are pedestrian areas and are made up of a

STANDARD FACILITIES



1. CES
2. Language laboratory
3. Library
4. Leisure centre
5. Sports
6. Swimming pools
7. Nursery - adventure playground
8. Exhibition gallery
9. Cultural centre
10. Open-air theatre
11. Holiday camp
12. Young workers' hostel
13. Shops
14. Museum of technology
15. Excavation workshop
16. CEC administration
17. Social centre
18. School medical service
19. Health centre
20. Medico-psycho-pedagogical centre
21. Adult vocational training agency
22. National employment office
23. Guidance and information centre

FUNCTIONAL SETS



1. Administration Reception
2. Education
3. Art/craft workshops
4. Restaurant
5. Documentation
6. Consultation Guidance
7. Meetings Public performances
8. Housing
9. Museum of technology
10. Sports

succession of streets and squares; they form the main social areas - that of meetings and exchanges.

Continuity and standard grid. The built facilities are conceived as if they were contained in a single building on a uniform grid covering the whole of the constructible part of the site. This means that the built facilities can be split up at will, and separated and interconnected at will to suit the requirements of future programmes not yet known in detail or present programmes that may change. One of the advantages of this grid calls for mention: it meant that the problem of conserving the existing trees could be easily solved.

A. Gautchi – P. Louvel

Continuous linear network of internal traffic routes. The network of generously and variably dimensioned traffic routes between the various buildings is at two levels and are parallel to the two main axes.

Avoidance of monumental proportions and conformity with the scale of the landscape. The built facilities are intentionally small in

THE CENTRAL MALL CONSTITUTES ONE OF THE MAIN AREAS OF THE CAMPUS

Jean Biaugeaud

The campus laid out along the mall the true function of which has not yet been found (Februa , 1974)

Management of Istres CEC

Fête on the mall (May 1976) showing the possibilities offered by this area

size (no long facades) and low in height. They are all staggered in plan and elevation so as to form accessible terraces and open air spaces. In this way the outdoor areas can be shaped and the architecture made to follow changes in elevation, bypass obstacles and conserve the existing trees which, in this case, were all kept.

Importance of outdoor areas. In view of the climate and the characteristics of the environment, the outdoor areas have a major part to play. There are three main features: the central mall is a common area serving all functional sets; the pine forest has been conserved, to the largest extent possible, and accommodates play areas, quiet areas and some experimental plantations; the cliff will be transformed into an urban park on several levels, but so far only minor works have been carried out (e.g. the staircase leading to the harbour).

DETAILED PLANNING AND DESIGN

Nature of the Process

53. With the general master plan as a point of departure, the team of architects then proceeded with the planning and design (micro-planning) of each functional set using as a basis what is normally provided by standard facilities. The work involved was as follows:

Converting the schedules of accommodation of standard facilities into schedules for the functional sets. Here there ceases to be any line-by-line equivalence between the two types of schedules. For instance, the floor areas given in the standard CES schedule are located in five different functional sets and those for the leisure centre in four. The normal procedures which predefine facilities in terms of rooms mean that the standard schedules have to be taken as the starting point. The constraint arising out of this increases, the stricter the administrative predefinition of facilities, and is at its maximum for the CES and the sports centre.

Phased development of planning and design work. Design work on each particular facility was governed by the phasing over time of the administrative decisions as to their final inclusion in the programme, their capacity and their financing.

54. The implications were as follows:

- difficulty of adjusting the successive elements to fit the overall master plan and restricted scope for providing sets of facilities that are more or less independent of corresponding standard schedules;
- opportunity to build up experience and thus to amend initial designs in its light, and to have a dialogue between architects and users for facilities designed after the Centre was opened;
- inclusion of modifications into the schedules, which meant that the project could be more tailor-made but which also meant that time and energy were wasted on studies and design work that had to be re-done.

55. The architects played a predominant role. They took responsibility for the co-ordination by dealing with the facilities as a whole and by interpreting the implications of co-ordination in the design of each particular set of facilities. They did not, however, work in isolation but in consultation with various groups as follows:

The representatives of the central administrations and their services in the Départements. The latter, however, have only limited powers and officials from Paris had to be involved in any negotiations with repercussions on design and schedules (the administrative cost of this procedure - although it has not been calculated nor debited to the project - has been relatively high).

The users (e.g. the chief librarian, the "animateurs" of the leisure and cultural centres).

Consultation with the second group of people could only occur for those facilities that were designed after the Centre was opened. Those in the first group have had the predominant and even exclusive role when the facilities concerned were governed by predefined schedules of accommodation or standardised models (CES, sports centre). In some cases (library, museum), the architects set up specialised working groups made up of regional or national experts or practitioners to take part in the design work.

56. Planning and design were also affected by bulk-purchasing procedures and standard models. In the case of some facilities forming part of standardised implementation programmes at national level (serial tendering for industrialised buildings) planning had to be confined to questions

of location (the indoor swimming pool) or else be the subject of drawn-out negotiation not only with central government departments but also with the building enterprise which, in most cases, was favourable.

An Example of Planning: the CES

57. The planning of the CES was governed by two major options:

a) Breakdown of the standard schedule of accommodation into functional elements (Table 2)

Table 2

BREAKDOWN OF ELEMENTS OF THE SCHEDULE OF ACCOMMODATION FOR THE CES

Nomenclature in the CES Standard Schedule of Accommodation	Theoretical Floor Areas(1)	CEC Functional Sets Incorporating these Elements
General classrooms	1 534 m^2	Education
Specialised rooms (history and geography, science)	204 m^2	
Rooms for individual study	120 m^2	
Specialised rooms (practical subjects; crafts; drawing)	768 m^2	Art/craft workshops
Dining room; kitchen	500 m^2	Restaurant
Administration (offices and annexes)	160 m^2	Administration and Reception
Teachers' common room and library	120 m^2	
Documentation	60 m^2	
Pupils' library	120 m^2	Encounter, Meetings (combined, in fact, with the preceding set)
Pupils' association	72 m^2	
Music room	60 m^2	
Staff housing	526 m^2	Housing

1) not including circulation areas and annexes.

The CES is thus not treated as a school which, as a separate unit would be included in the CEC. Its schedule of accommodation is split up among

the various units making up the Centre. Some of these are composed only of elements from this schedule (education, restaurant) whereas others combine them with elements contained in the schedules of other facilities.

b) New framework for the educational organisation. This new framework was proposed by the planning department of the Ministry of Education and lists out the effects that the integration of the CES was expected to have on its operation and the innovations that were desirable and possible. Its recommendations were as follows:

- the school should be organised in relatively independent "houses" (four houses of 300 pupils each) to encourage the development of social life;
- work should be organised in differentiated groups of varying and variable sizes;
- pupils should be encouraged to work independently by intensive use of resources (e.g. documentation) and special attention should be paid to individualised, independent work;
- the "education" block should be designed to accommodate about 70 per cent of pupils' activities, the remaining 30 per cent should take place in the other facilities of the Centre. It should also be designed to accommodate non-school activities (adults, young people, children, etc.).

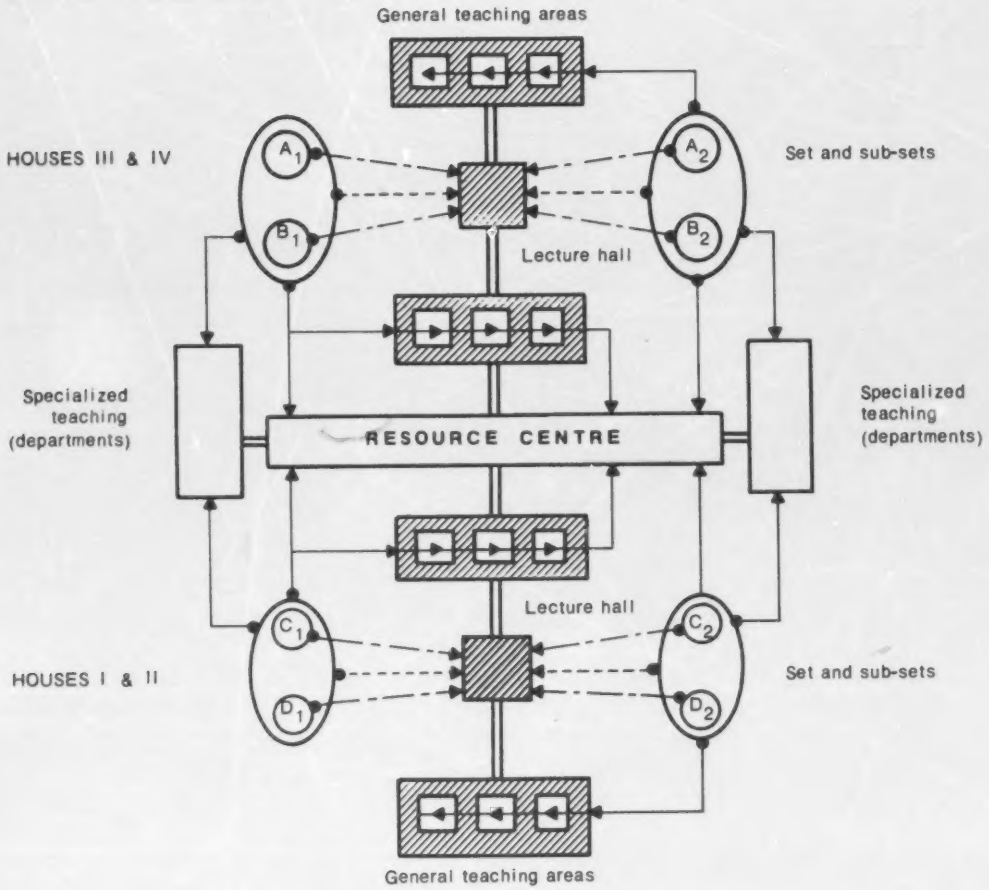
58. After discussion with the educationists, the architects' work resulted in the following proposals (Figure 4):

The "education" block would be divided into four equal parts (one per house). Each would consist of a minimum number (calculated on the basis of intensive space use) of closed rooms of different sizes (38 m^2, 50 m^2 and 65 m^2), an office, and open spaces capable of accommodating various activities and encouraging decompartmentation at a later stage (foreseen in the plans).

Each part would open onto a multi-purpose common space at two levels. The lower level would be an auditorium allowing for meetings of large groups (up to 300 people), self-expression activities, public performances, etc. The upper level would be designed for individual work or work in small groups, documentation, etc. This space would include the areas contained in the standard schedule under the following headings: rooms for individual study, circulation areas and the covered courtyard.

Figure 4

DIAGRAM OF THE ORGANISATION OF THE CES IN HOUSES



The block would occupy a total area equal to that of the corresponding parts in the standardised model, which formed the object of the government contract for the CES. The building system is that of the standardised model; the technical possibilities offered by the model were big enough for the plan, relatively irregular both in form and in volume, to differ appreciably from the standard plan.

59. The restricting factors were:

The standard plan for an industrialised CES, supplied as a turnkey project under the terms of the contract, was unsuitable for the project and the task of adaptation normally required of the architects in the standard procedure had to be replaced by a real planning and design exercise. This exceptional procedure departs from customary practice; it called for an unusual measure of tolerance and had to be carried out in unsatisfactory conditions as regards rapidity and remuneration.

In the supervisory procedures for standard projects, costs and areas cannot be treated as a whole; instead each space needs to be identified in the terms and dimensions of the standard schedule of accommodation. Any exceptions must therefore be justified and specially authorised.

There could be no dialogue between architects and users because the staff was not appointed until the school was opened. The design was therefore intentionally restrained, avoiding extreme solutions which might run counter to the aims and possibilities of the teaching staff. It simply provides an incentive for change and cannot claim to be a model of coherence.

60. The positive factors were:

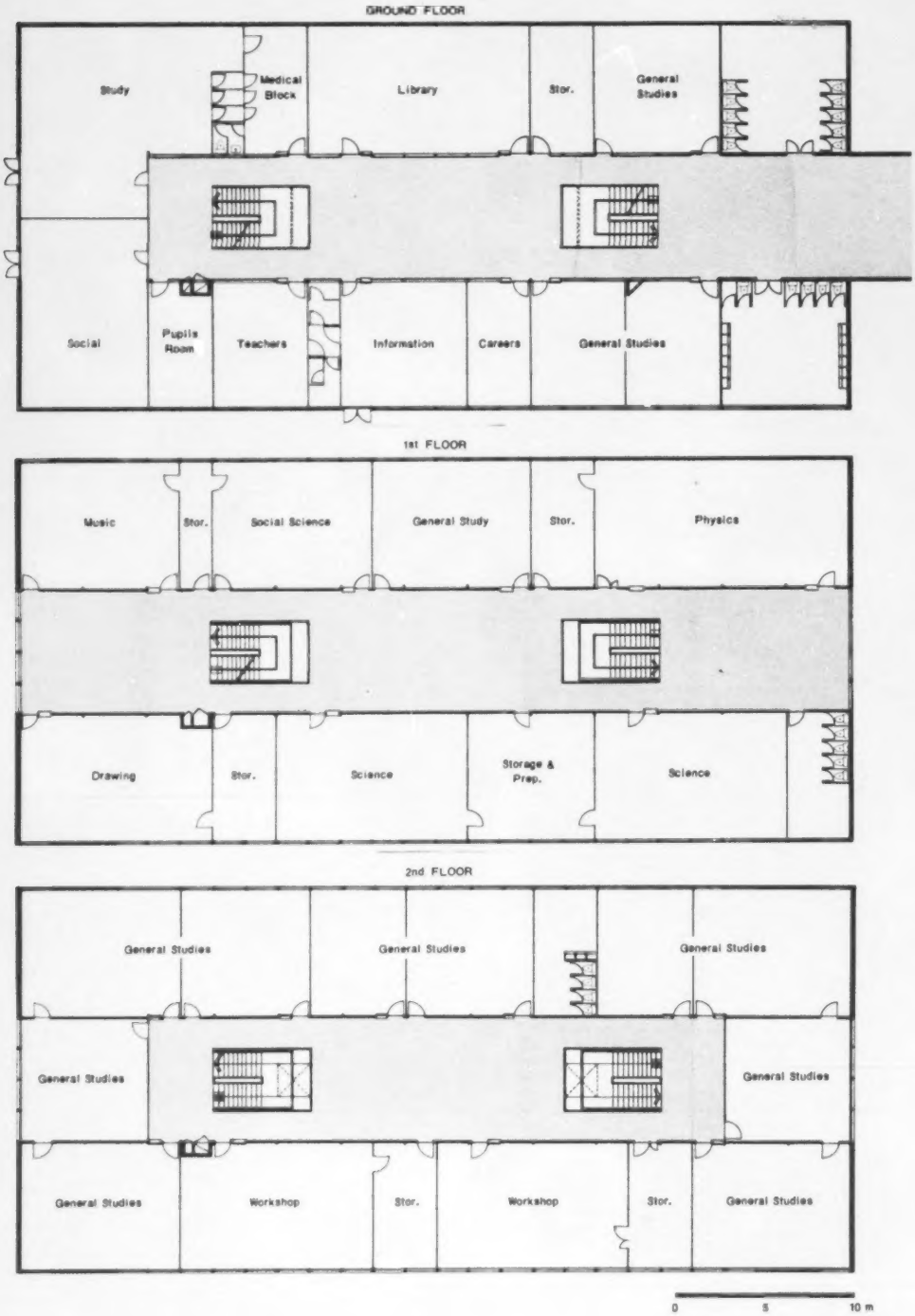
Firstly there was the attitude of the building enterprise which co-operated in the modification of the standard plan and was willing to make these changes without any increase in price (to the extent there were any additional costs, these were borne by the enterprise).

Failing any dialogue with users, it was the dialogue established between the architects and the representatives of the planning department of the Ministry that enabled the design to take account of new trends. Consultation restricted to the officials of the government services in the Département (who have no power of

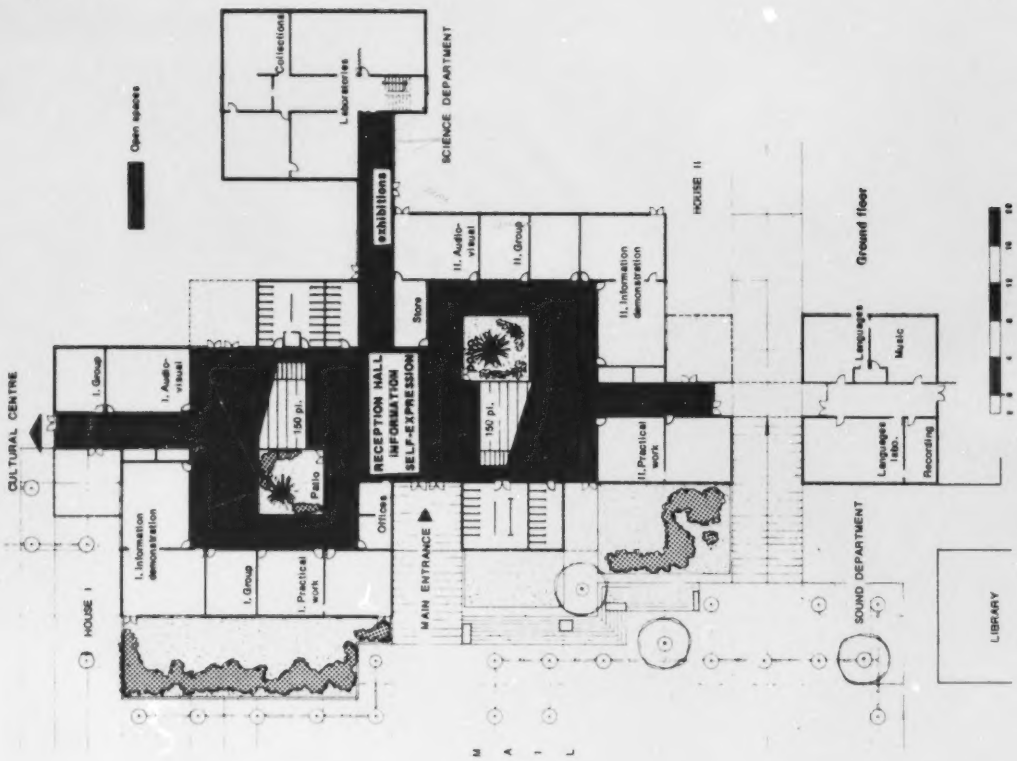
Plan 2. STANDARD PLAN OF THE TEACHING BLOCK OF A LOWER SECONDARY SCHOOL

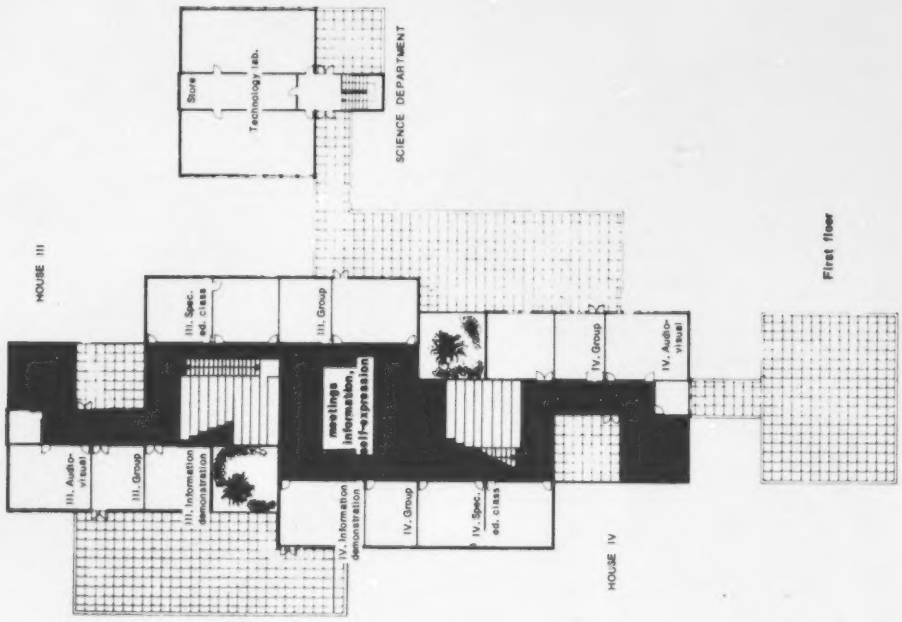
Industrialized Building System

Enterprise : GEEP - Industrie (As approved in 1970)



Plan 3. PLAN OF THE «EDUCATION» BLOCK OF THE ISTRES CEC





decision on briefs) would not have been sufficient to dispose of obstacles.

61. A comparison between the CES standard plan (Plan 2) which served as a basis for the conclusion of the building contract and the plan for the CES actually built (Plan 3) gives an idea of the extent of the innovation.

Effects of Co-ordination on the Planning and Design of the Various Facilities

i) Modifications to schedules of accommodation for traditional facilities

62. As the CES example has shown, co-ordination implies that provision should not be made, in a given facility, for elements that relate to activities that can be accommodated in better conditions in other facilities. The CES library, for instance, was not provided in the "education" block. The municipal library, incorporated in the Centre, provides bigger facilities but in return it must be able to accommodate school activities and provide a documentation centre and working spaces for this purpose - not normally provided in the usual brief for a public library. Similarly, the social and leisure centres did not comprise the domestic science laboratories normally included in briefs for these types of facilities: they use the corresponding facilities of the CES designed for such multiple use, but not normally provided in the case of a traditional CES.

ii) Exchanges and new possibilities

63. It would have been possible not to build those areas that corresponded to accommodation duplicated in several facilities. In actual fact these areas were built but have been assigned for other uses. This was not so much by choice as the result of the technical and financial autonomy of briefs for individual facilities and their phased construction. But the solution was very helpful because it enabled exchanges to take place between facilities and opened up possibilities that separately-built facilities would not have offered.

64. As Table 3 shows, these changes in the use of areas may be a matter of simply putting the accommodation to a different use or of supplying new types of facilities not included in any traditional schedule. On the other hand it was not always possible, for technical but mainly administrative reasons, to eliminate all duplication of comparable facilities. There are, for example, four separate locations for medical consultation: the health centre, the school's medical service, the industrial medical service and

the ante-natal clinic, all operating on a part-time basis. There are also several different boiler-houses.

Table 3

MODIFICATIONS TO STANDARD SCHEDULES OF ACCOMMODATION

Nomenclature in Standard Schedules of Accommodation	Facility Performing the relevant Function	Modifications
CES - pupils' library	Public library	Large meeting room (for community use; operated as a library for a year)
CES - documentation	Guidance and Information Centre	Meeting room (for community use)
CES - guidance office	" "	Meeting room
Social centre - activity areas and meeting rooms	CES workshops, and leisure centre	CEC director's office; office for "animateurs" (sports and culture) - new design; reception hall and cafeteria - new design
CES - drawing	Art/craft workshops as part of the leisure centre	Social area for pupils
CES - covered court-yard, rooms for individual study, circulation areas	The whole Centre	Auditorium (multi-purpose areas) - new design

iii) Linkways, circulation areas, reception

65. The continuous network of covered circulation areas links up the various sets of facilities and repeats the role played by the mall. It is dealt with as a sequence of spaces of varying sizes intended to play various roles: circulation between functional sets, exhibitions, public performances (an "educational gallery" runs along the glazed facades of the sports halls), reception. The latter role is reflected in the numerous halls provided (each set performs a secondary reception function backing up that of the main reception point). This solution is costly in terms of space particularly since the campus-type layout means that facilities are dispersed. It was adopted in the belief that these spaces, often regarded as serving little purpose, had great importance in co-ordination(1).

1) This assumption has not been entirely verified (cf. paragraph 167) either because of its architectural translation or because provision of the key spaces in this network (those linked to the multi-purpose hall, the gallery linking it to the sports hall) has been delayed or post-poned (cf. paragraph 78).

iv) Coherence of the co-ordinated complex

66. The general principle of pooling the resources allocated for the various facilities for the benefit of the unity of a complex which was to integrate them was only partly fulfilled because of the tension between the specific requirements of the individual schedules and the requirements of co-ordination. Some aspects of this tension are outlined below:

It was not possible to maintain the unity of the building system for circumstantial reasons (bankruptcy of the building enterprise before the work was completed, opposition of the new municipality to the lightweight steel frame system) and other more basic reasons (lack of fit of certain sports facilities to the system).

The pooling of the areas allocated under the different schedules is possible only in certain cases and in varying conditions. The following are some examples:

- the joint administrative offices for the CES and the leisure centre: areas which, according to the procedures, it must be possible to identify, are placed next to one another with a fictitious boundary;
- hall used jointly by a number of services: pooling of areas with the same purpose on a co-ownership basis, (halls of adult vocational training agency, the guidance and information centre and the national employment office);
- the cultural centre: in this case various sources of finance, without any definition of areas according to standard schedules (Ministry of Culture and the Department for Youth, Sport and Leisure) were pooled to produce a merged facility.

FINANCING

67. The financing of the Istres CEC is governed by its standard list of facilities. From this standpoint, a facility has to be regarded as an element of a national investment programme for which this or that ministry is responsible. For example, the CES (1 200 pupils) is defined as to its nature (type of accommodation) and quantity (area to be built) by the Ministry of Education; the leisure centre is defined by the Department for Youth, Sport and Leisure, etc. For each facility, moreover, a cost is fixed in more or less absolute terms by each ministry and serves as a

basis for determining the financial allocation. The financing for the whole of the project, therefore, was governed by explicit reference to predefined facilities each of which had to be included in the regional plan and form the object of a decision to grant the necessary appropriations. Each facility, depending on its nature and the ministry responsible for it, is governed by special rules.

Diversity of Financing Procedures

68. In terms of financing procedures, there are two types of facility in the CEC:

Those directly financed by the State, which retains ownership, or by an agency responsible, on its behalf, for performing the activities for which the facilities are intended (e.g. the guidance and information centre, the national employment office, and the psycho-technical centre of the adult vocational training agency). Construction and equipment costs are paid in full (100 per cent) by the ministries or agencies concerned, and the site is given by the municipality to the Département.

Those financed by the local community (first the Istres municipality and then the community development syndicate) which receives subsidies either from the State (each ministry determining the amount it will give) or from other bodies whose share is negotiated for each facility concerned.

69. The CES is a special case. Because of the procedure adopted for its construction (orders grouped in an industrialised building system) the State intervenes directly in paying the construction and equipment costs; in this case the local community is obliged to hand over responsibility for commissioning the work to the State, but supplies the site and additional finance as decided by the State. Indirectly, this case is similar to the preceding one of State subsidies, but the rate of the subsidy is much higher. Once built, the CES is handed over to the municipality.

Diversity of Sources of Finance

70. The sources of finance are thus as follows:

- central government, via various ministries each of which has its own financing rules within the general legislation. Six minister-

ial departments were involved in the CEC: Education; Employment; Youth, Sport and Leisure; Social Affairs; Public Health; Defence;
- quasi-public bodies: social security and family allowances fund;
- the local community (Département, municipality or community syndicate).

Diversity of Financial Participation Rates

71. The figures in Table 4 show that the share contributed by each source varies from facility to facility. The rates of financing are decided by each ministry or body concerned; the real rates are not always the same as the theoretical rates because of certain additions decided in the course of the project or because of certain exceptional contributions. This applies in particular to the sports facilities.

Decisions on Finance

72. The first decisions on finance were taken at the level of central government departments, State finance bringing with it that of the local community and of other bodies (in any event the latter type of finance has to be the subject of separate decisions). For central government finance, special applications have to be made to each department concerned but within the framework of the regional development plan elaborated under the responsibility of the Préfet of the region. It is therefore the Préfet who, in practice, acts as the finance co-ordinator, the local community concerned having neither the power nor the technical and administrative resources to perform this role.

73. The financial co-ordination covered the scrutiny of the various applications - one for each facility making a total therefore of 17 - and of the timetable of the various administrative decisions regarding finance. The latter were numerous (over 30 altogether) and greatly spread out over time (from 1970 to 1975) because of the need to split the appropriations up into several phases distributed over successive annual budgets; this was sometimes the case even for one and the same facility. The financial burden shouldered by the local community was relatively light as a percentage of total costs but relatively heavy in relation to its resources. It raised loans to cover the bigger part of its financial contribution.

Tableau 4

SOURCES OF FINANCE FOR THE CO-ORDINATED FACILITIES OF THE ISTRES CEC (1)

(excluding site costs)

Facility and Type of Finance	Cost (dated) in French francs	Share of Finance in Percentage				Supplementary Information
		State	Local Community	Département	Agencies	
One source of finance						
Guidance and information centre	737 646 (1972-73)	100	-	-	-	Ministry of Education
Local employment office	763 500 (1973)	100	-	-	-	Ministry of Labour
Psycho-technical centre of the adult vocational training agency	424 101 (1973)	100	-	-	-	Ministry of Labour
Two sources of Finance						
CES	6 089 546	92.75	7.25	-	-	Ministry of Education
Leisure centre	635 000 (1970)	40	60	-	-	Department for Youth, Sport and Leisure
Continuous training and social advancement centre	409 000 (1970)	97.80	2.20	-	-	Ministry of Education
Public library	1 200 000 (1971)	50	50	-	-	Ministry of Education
Sports halls	2.602 796 (1971-72)	52.80	47.20	-	-	Department for Youth, Sport and Leisure
Indoor swimming pool	1 337 500 (1971)	50	50	-	-	idem
Sports grounds	2 022 821 (1970-71-72)	48.1	51.9	-	-	idem
Multiple sources of finance						
Outdoor swimming pool	1 069 989 (1973)	48.25 20.32	31.43	-	-	Department for Youth, Sport and Leisure Defense
Social centre	527 334 (1972)	36.46	17.96	9.12	36.46(2)	Social Affairs
Nursery	154 130 (1972)	36.01	18.99	9.00	36.01(2)	
Health centre	1 239 951 (1972-73)	42.53	2.15	27.66	27.66(3)	Public Health
Medico-psycho-pedagogical centre	737 646	45.37	0.81	26.91	26.91(3)	

1) The data do not concern the project as a whole; excluded are the facilities not yet built at the time of the case study, site costs and costs for external works: car parks, road works and landscaping (907 504 French francs, of which 45.75 per cent was paid by the State).

2) Family allowance fund

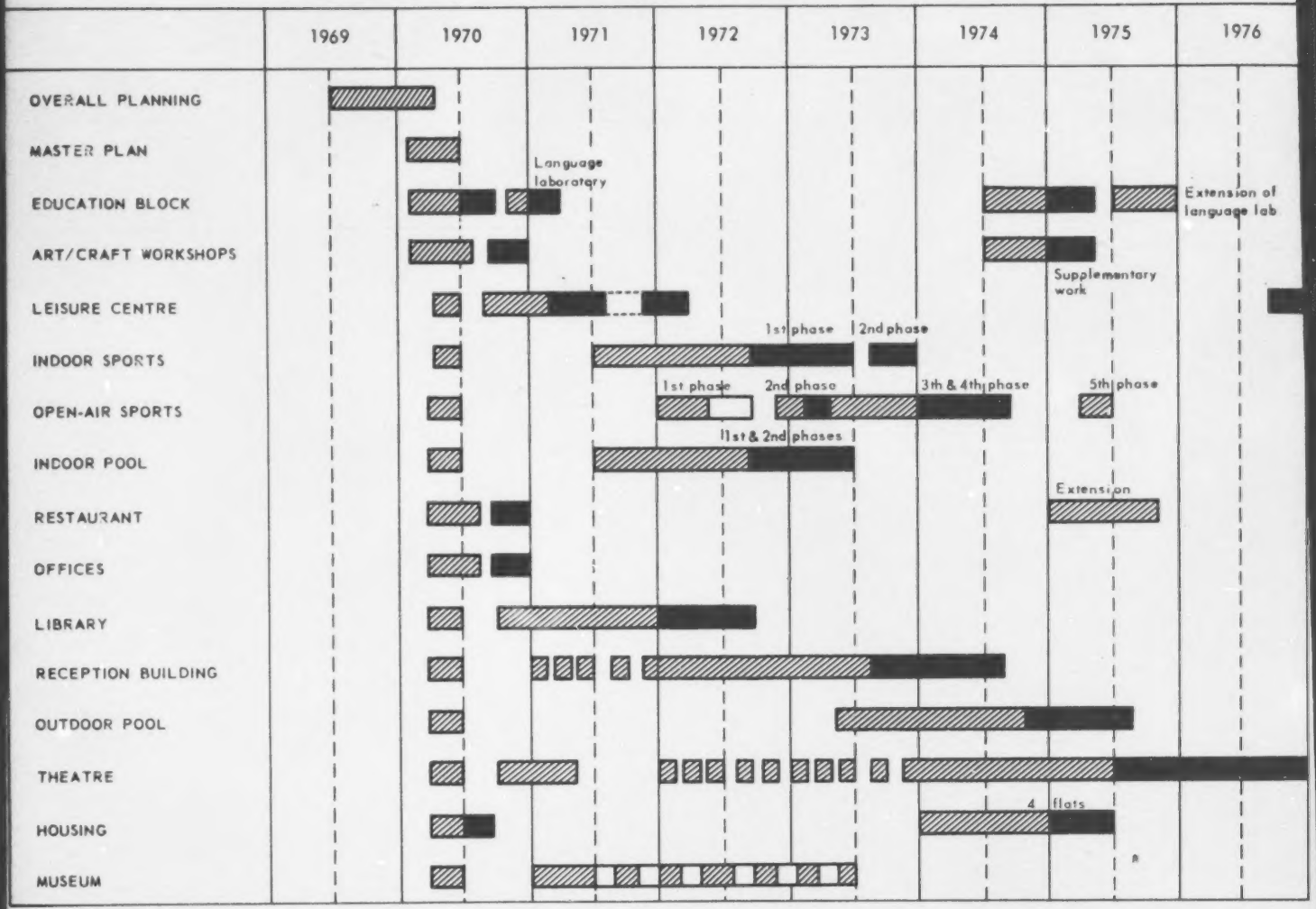
3) Social security

SUMMARY OF BREAKDOWN OF FINANCE FOR THE PROJECT AS A WHOLE

Cost	State Financing	Local Community Financing	Other Financing Département, family allowances fund, social security, etc.)
24 769 963	15 949 065	6 588 220	2 232 678
100%	54.3%	26.6%	9.1%

Figure 5

TIMETABLE FOR THE PLANNING AND CONSTRUCTION OF THE ISTRES CEC [1]



Planning, design, and technical, administrative and financial approvals.

Construction

1. The holiday camp, actually under construction, is not included in this figure.

Part Three
CONTENT OF PROJECT

OVERALL ORGANISATION

74. As already shown, the Istres CEC is organised on the campus model - sets of facilities each with a dominant function grouped together on the same site (see Plan 4).

Access, Linkways and Circulation Areas

75. The links between the CEC and the fairly far-distant housing areas are by road (i.e. by car and, more recently bus). Road traffic stops at the main entrance where the principal car parks are located and where the roads serving neighbouring areas converge. The choice made initially in terms of urban planning is therefore refuted by the facts since the building of the new town centre has not yet begun. The potential risk of the campus becoming an enclave could lead to its relative isolation particularly if a road interchange were built opposite the main entrance. Certain defense measures (partial fencing off) and the size of the sports grounds could heighten this risk.

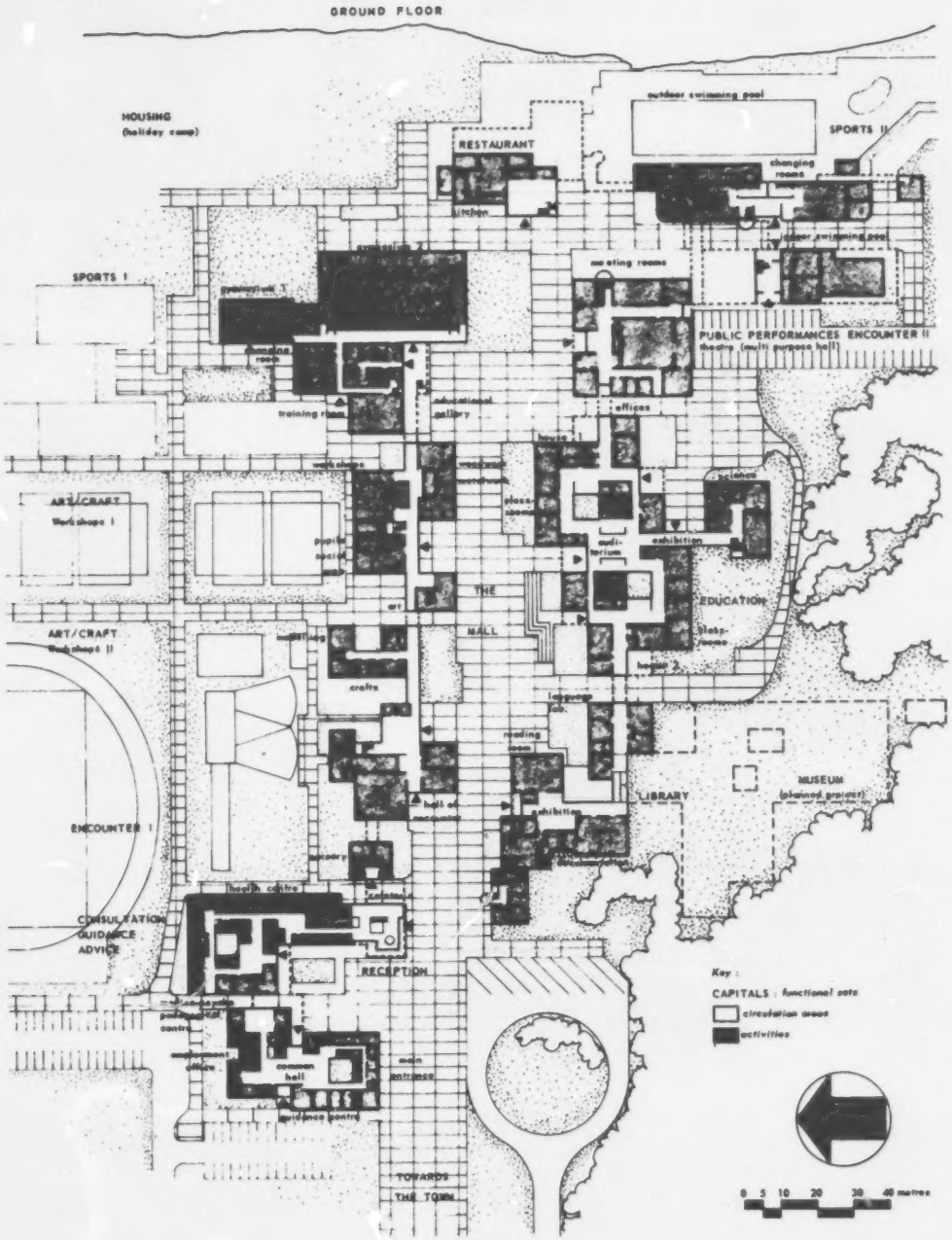
76. In physical terms, the character of the Centre is determined to a large extent by the "weight" of certain major facilities: first sports (two centres: the gymnasia/sports hall and game rooms plus two swimming pools, an area of more than 6 000 m^2) and second education with an area of nearly 4 000 m^2.

77. Because of the site and the climate, the various external areas will play an important role but have so far been treated rather unequally. Neither the cliff area (urban park plus pedestrian paths towards the town), nor the pine forest have yet been arranged. The central mall - the axis of the campus serving all the facilities - does not yet perform its true role (the trees are too young and work is still in progress)(1). Conversely, the sports grounds have been extensively developed both in terms of area and standard of equipment and because of the nature of the site some people may have considered them to be encroaching.

78. The circulation network is not yet complete. It is still split into two parallel axes on either side of the mall with no communication between the two. A bridge was planned over the mall to link the sports unit to the

1) A very rapid change for the better has occurred in 1976.

Plan 4. BLOCK PLAN OF ISTRES CES



FIRST FLOOR
RESTAURANT
dining rooms
outdoor swimming pool
SPORTS II
SPORTS I
gymnasium 2
gymnasium 1
indoor
swimming pool
PUBLIC PERFORMANCES ENCOUNTER II
theatre (multi-purpose hall)
association offices
house 3
class-rooms
science
WORK-SHOPS
home economics
art
EDUCATION
class-rooms
house 4
administration secretariat
ADMINISTRATION
meetings
childrens corner
LIBRARY
CONSULTATION
GUIDANCE
ADVICE
documentation
manage-ment
social centre
health centre
industrial medicine
adult vocational training agency

Table 5

SCALES OF URBAN DEVELOPMENT FOR THE CO-ORDINATED FACILITIES OF THE CEC

Facility	Scale of Urban Development by Facility	
	According to Norms	At Istres
Social centre	About 500 m^2 for a population of 10 000	Istres municipality
Guidance and information Centre	About 500 m^2 for a population of 80 to 100 000	Istres and surrounding municipalities
Medico-psycho-pedagogical centre	No norms	Etang de Berre region
Psycho-pedagogical centre of the adult vocational training agency	No norms	Etang de Berre region
Local employment office	At least one per Département	Linked with the development of Fos in the Etang de Berre region
Health centre with ante-n.tal service	About 700 m^2 for a population of 20 to 25 000	Istres
CES	Size: 1 200 pupils for a population of 10 000	Immediate neighbourhood; there is another CES at Istres
Continuous training and social advancement centre	No norms	Linked with the development of Fos, Istres and surrounding municipalities
Leisure centre	About 600 m^2 for a population of 10 000	Istres municipality
Cultural centre	No norms	Istres and surrounding municipalities
Municipal library	About 1 200 m^2 for a population of 20 to 30 000	Istres and surrounding municipalities
Museum of Technology about 5 000 m^2 (planned project)	Reference: the Le Havre museum (population in catchment area: 200 000)	National level
Outdoor playing grounds	Three playing grounds of 20 x 40 m for one 1 200 pupil CES	District where the CEC is located
Sports stadium and tennis courts	No norms	Istres municipality
Indoor sports facilities	Population of 5 to 10 000	Istres municipality
Swimming pools - 1 indoor (25 x 10 m) - 1 outdoor (50 x 20 m)	 Population of 20 000 Population of 50 000	25 m pool: municipality level; the two pools together are intended for wider use, including by tourists (marina, holiday camp)
Marina	No norms	Tourism, national level
Holiday camp 120 beds	No norms	Tourism, national level

theatre but was never constructed because it could not be included in the schedule of any of the facilities built. In addition, the restaurant and swimming pools are not connected to the other facilities.

Scales of Urban Development

79. In terms of resources and capacity, the facilities grouped on the Istres campus in theory serve, according to their type, areas of different size, in other words they have different scales of urban development(1). The scales are laid down in norms or by reference to usual practice in France.

80. There are five different levels of area served: districts, municipalities, groups of municipalities, small region, whole of France. The policy adopted in the case of the Istres CEC is to attract users from various distances. In Grenoble, on the other hand, all the facilities except one (a multi-purpose hall accommodating 600 people) are on the scale of the district served (a population of about 10 000). In particular the "large-scale" facilities - with a very wide catchment area - are intended to prevent the area from becoming inward-looking and to ensure that those activities that are of wider interest affect the other activities of the Centre. This is true in particular of the museum of technology (not yet built) which was to be a centre of national interest, serve as point of departure for scientific exploration in the region, and provide means of initiation to the sciences for the schools in the area. The disparity of catchment areas for the various activities (and facilities) is a particular feature of the Istres complex and is more strongly affirmed there than in similar centres elsewhere in France. The scales of urban development are given in Table 5.

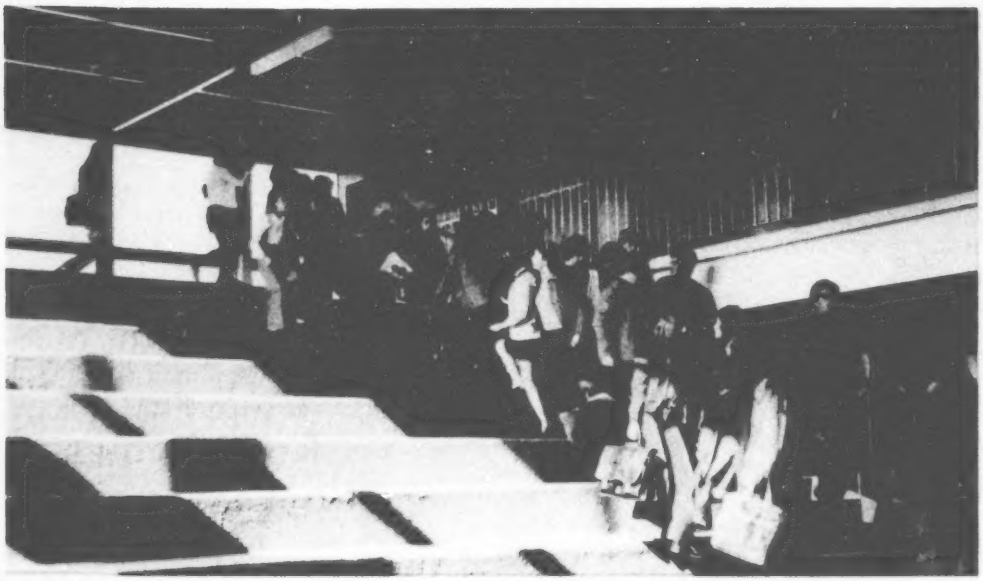
SOME EXAMPLES OF FACILITIES DESIGNED WITH CO-ORDINATION IN MIND

The Auditorium (within the education block - see Figure 6)

81. The central hall (14.40 x 18.00 m) is extended by two sets of tiered seating (2 x 150 seats) combined with vertical circulation areas (lateral staircases), each being bordered by a patio. At the foot of the tiered seating, there are two pits (0.50 x 10.80 x 3.60 m) providing a raised level in the central part enabling it to be used as a stage or as an area

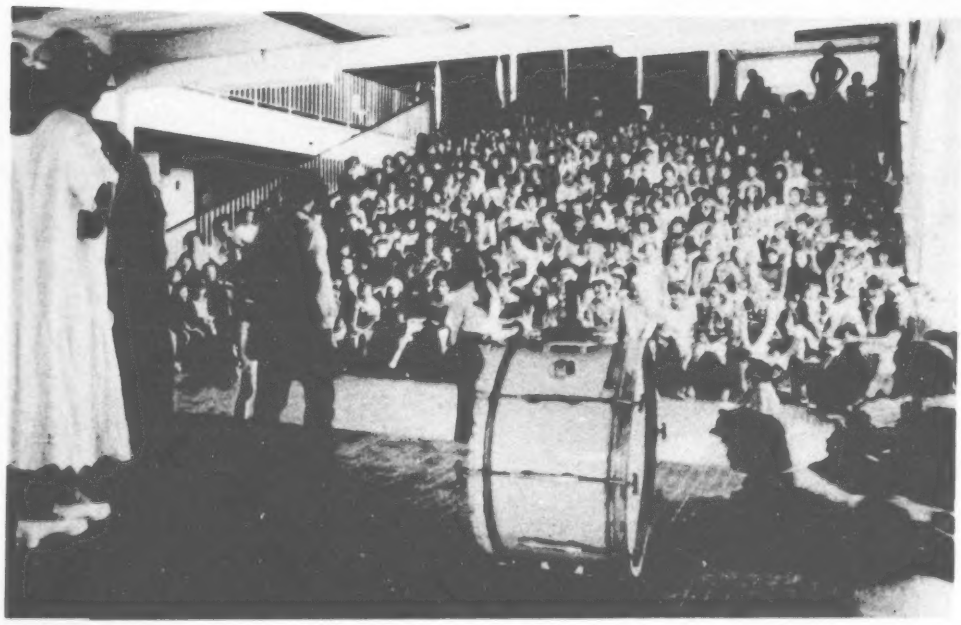
1) The term generally used to designate the area served by the facility concerned, i.e. its catchment area.

DIFFERENT USES OF A TYPE OF FACILITIES CONCEIVED WITH CO-ORDINATION IN MIND



Jean Biaugeaud

Auditorium as circulation area



Public performance for children (establishment: the open-air centre)

PEB Secretariat

Self-expression exercise during a French lession (establishment: CES)

Management of Istres CEC

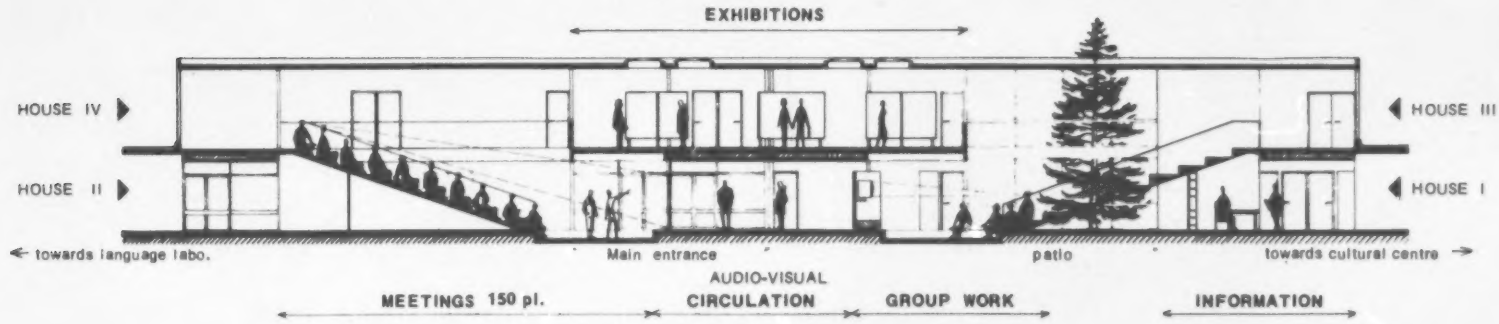
Concert (establishment: the cultural association)

Management of Istres CEC

Meeting on the urban development of a district close to the CEC (establishment: leisure centre)

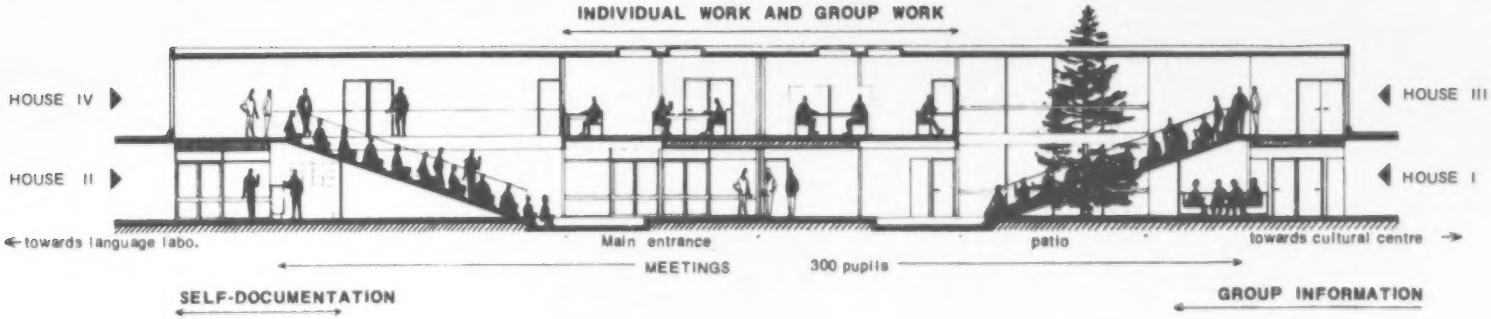
Figure 6

SECTION OF THE AUDITORIUM



Utilisation 1

- 94 -



Utilisation 2

for self-expression or for meetings of small groups. The seating is suitable for separate or combined use of the two parts, by using either each pit separately or the whole of the central space as a stage.

82. This type of facility, therefore, fulfils a number of functions:
- reception: central position, access from the middle of the mall;
- circulation: distribution towards the "houses" of the CES and the exhibition gallery leading to the science block;
- exhibition, display and information: posters, announcements, temporary exhibitions (extending to the upper level or in the gallery);
- education: information meetings for large groups, and group work (in particular self-expression and acting exercises in relation to French lessons);
- public performances, assemblies and meetings.

83. The upper part (platform measuring 14.40 x 14.40 m) opens onto the hall but is more closely related to the school part proper. During the first few years its function remained imprecise. Today it is fitted out for individual work and the use of reference books (carrels).

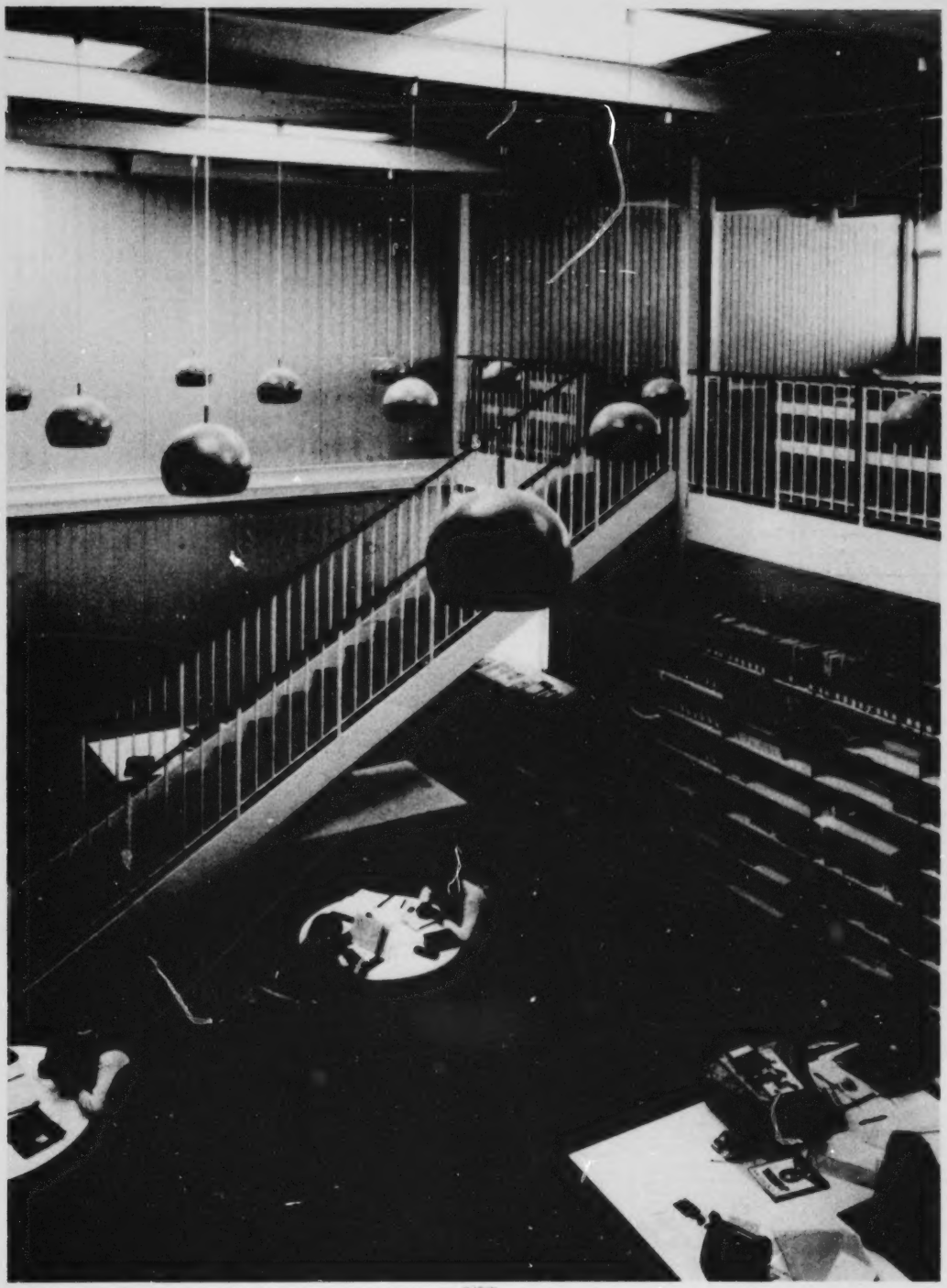
84. The unit is simple and robust; the columns (span of 7.20 m) kept in the open spaces do not impose any real constraints on use. Because of its position, this space can stay open continuously(1) - the teaching areas proper can if necessary be shut off without preventing the use of the auditorium. Under the seating, small areas had been arranged to provide a supplementary documentation space. In actual fact these have been closed in and one of them fitted out as a store for the cultural association and the other as a sales counter for the pupils' association.

The Library (see Plan 5)

85. This unit is made up of several parts which are clearly separated from one another because of the indented plan form and at the same time are interconnected by a central hall and linkways that can be used as circulation areas as well as exhibition galleries:

		Approximate area
i)	public lending library	310 m^2
ii)	reference, reading and study	350 m^2
iii)	administration	65 m^2
iv)	storage, preparation and repair work	165 m^2

1) For reasons linked to the operation of the CES (school use) the fulfilment of these intentions has proved difficult, if not illusory.



Jean Biaugeaud

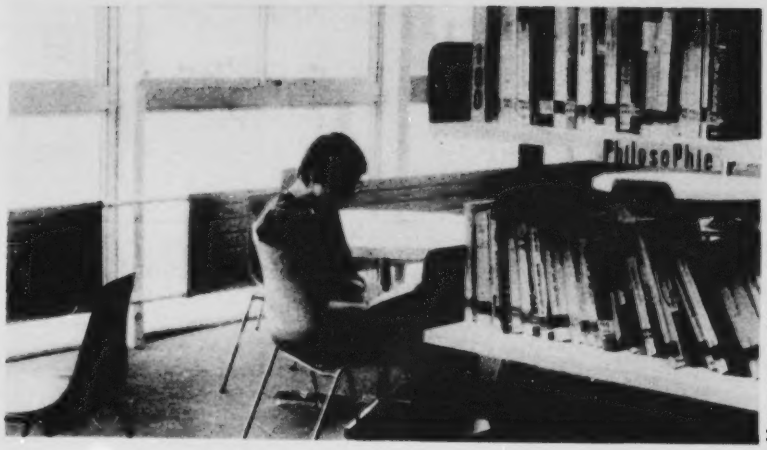
Reference and reading library

Jean Biaugeaud

View of "children's corner"

PEB Secretariat

Children working in the reference library

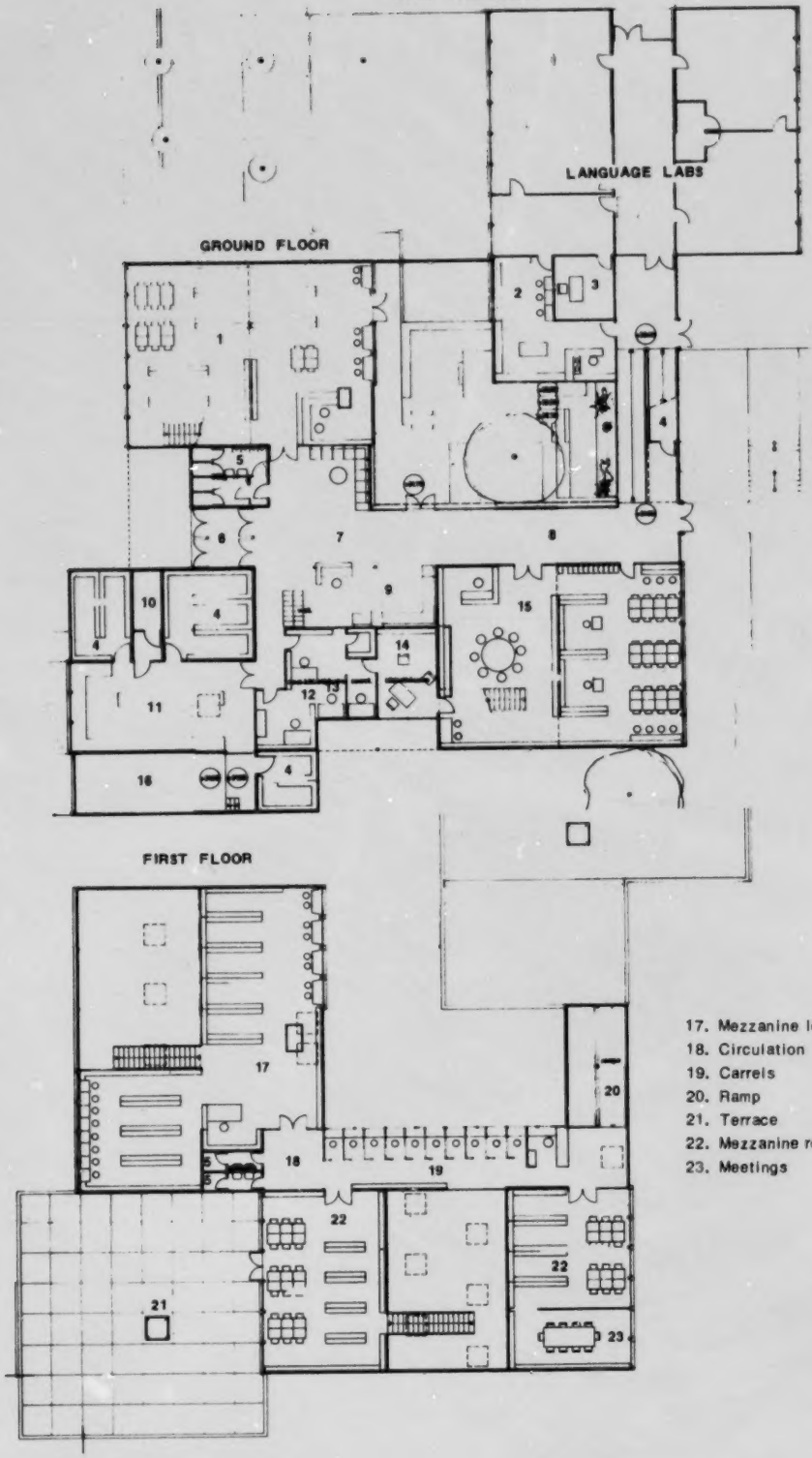


Management of Istres CEC

Public lending library

Plan 5

THE LIBRARY



1. Lending library
2. Record library
3. Recording
4. Store
5. Lavatories
6. Porch
7. Reception
8. Exhibitious
9. Periodicals
10. Driver
11. Handling
12. Deputy librarian
13. Secretary
14. Librarian
15. Reading library
16. Bibliobus
17. Mezzanine lending library
18. Circulation
19. Carrels
20. Ramp
21. Terrace
22. Mezzanine reading
23. Meetings

		Approximate area
v)	Listening room, lending library for records and other audio material	50 m^2
vi)	Reception, exhibitions, reading of periodicals	170 m^2
vii)	Circulation areas (with no other purpose)	90 m^2
	TOTAL	1 200 m^2

86. The parts of this unit are thus differentiated primarily according to the functions usually performed by a public library. But because of co-ordination, this differentiation features other characteristics to take into account the different publics and their requirements.

87. Parts i) and ii) have different characteristics: the public lending area is designed to give the public free access to the shelves, the checking in and out of material taking place at the entrance of this part. All age groups are admitted: children, adolescents (including the pupils of the CES), adults and old people. The spaces are mostly open and there is the traditional mix of bookshelves and reading desks. The reading library, on the other hand, is conceived for more structured activities; individual or group study is given priority; documents and books are consulted on the spot and rarely borrowed. The design thus distinguishes study and access to documents and, more generally, reflects the dominance of school use.

88. These two parts are arranged on two levels (one mezzanine), thus preserving their unity whilst keeping the various areas relatively independent of one another. This enables, for example, a "children's corner" to be included in part i) and the study areas to be kept separate in part ii). However, because of the specific school vocation of the latter part, the combination of the various areas in the same open space is felt as a constraint and partial enclosures have been introduced or are being planned. In addition, the noise level of the building (steel frame construction) and the patterns of behaviour normal to libraries, which have little in common with the usual pattern of French school life, mean that users have to go through a fairly long, sometimes difficult but from the viewpoint of social relations interesting period of adaptation.

89. The level of performance (quality of building, furniture and equipment) is much higher than in most other facilities of the Centre (particularly the education block). The main reason for this is the difference in resources allocated (unit costs being 40 per cent higher than those for the CES) and the fact that the librarian was involved, throughout, in the design and planning work.

90. The record library is separated from the remainder, which does not contribute to the interpenetration of activities but does provide relative acoustic isolation. In addition this part is in direct communication with the adult education areas. The opportunities this provides hardly seem to correspond to any needs and little advantage is taken of them in the use of the accommodation. It may be noted, however, that the technical studio in the record library (originally planned as a recording studio) has been taken over by the recurrent education centre which is using it for maintenance in association with the language laboratories next door(1).

Art/Craft Workshops

91. These facilities were provided on the basis of the areas allocated in two standard schedules of accommodation: those of the CES and the leisure centre. However, they only partly comply with the organisational and equipment models induced by these schedules. The facilities consist of four parts located in three separate blocks linked by generous circulation areas (small halls and galleries).

		Approximate area
i)	heavy and light crafts (woodwork and metalwork)	410 m^2(2)
ii)	Hobby crafts (photography, modelling, weaving, pottery, etc.)	250 m^2
iii)	Fine arts (drawing, painting, etc.)	200 m^2
iv)	Home economics	230 m^2
v)	Circulation	250 m^2
	TOTAL	1 340 m^2(2)

92. Because these facilities were to be open to both children and adults a special effort was made to free the design and arrangement of the workshops and studios from the yoke of school models (craft rooms), by providing both open spaces accommodating a diversity of activities (workshops) and a variety of small-size specialised spaces communicating with each other (the domestic science laboratories providing conditions similar to those at home).

93. The art studios, grouped on two levels in one and the same open volume, have multi-directional natural lighting. Unfortunately, the poorness

1) The person in charge also handles the maintenance of the library's audio-visual material.

2) Including 180m^2 converted into a social area for pupils leaving 1 160m^2 for the art/craft workshops themselves.

of the furniture and equipment does not contribute to the profusion of activities nor to the great freedom of expression necessary for the non-school exercise of artistic activities (for which incidentally the demand in Istres is low).

94. A special aspect of the opening up of the workshops and studios to various publics is the high standard of the equipment in the mechanics workshop. There is a special reason for this. In the first years of operation this workshop was used for training skilled workers for the near-by aircraft factory. Most of the equipment installed by the firm at the time has been left behind.

95. There is a sharp difference between the workshops intended mainly for learning activities, where the users are guided by professionals (open workshops) and those in which the users are generally grouped in clubs to exercise their hobbies [the small, enclosed workshops in part ii]. This type of activity involves a need to distinguish oneself from others and even a tendency to withdraw on the part of those concerned or to want exclusive use of space. The need to protect work under way and the combination of the particular characteristics of these groups and the technical nature of their activities far outweigh the principle of multi-purpose use and the interpenetration of various activities (recent closure of rooms that were previously open).

Part Four
USE OF FACILITIES

ORGANISATIONAL PRINCIPLES

Institutional Aspects

96. The most general principle as regards the operation of the CEC is that all the material resources assembled there may be used for all the educational, cultural and social activities it is meant to integrate. The application of this principle, however, is restricted by a twofold institutional constraint bound up with the French context:

- in France, the activities are carried out by specialised institutions (CES, library, social centre, etc.) each of which is governed by its own rules and depends on an administrative authority at national or municipal level;
- as a rule, each institution is associated with facilities allocated to it as its own resources; as already mentioned in relation to planning, a facility is both a set of material resources and an institution to which the latter are assigned.

The use of the CEC facilities and in particular their joint and/or shared use by its various publics - is therefore closely bound up with the institutional organisation of the Centre.

97. Under present regulations and legislation, the CEC cannot be regarded as an institution and therefore has no legal status. Its status, in fact, is that of a federation of establishments. In the terminology used at Istres, an establishment is an institution with administrative and functional status, one or more specific functions and its own decision-making structure (management, board of administration, etc.). It was by an ad hoc convention that the various establishments in the CEC decided to co-ordinate their activities and to pool a number of their resources - in particular physical facilities. This convention had to be agreed by the government departments responsible for the various establishments. It is guaranteed by the Préfet of the region as representative of the State and

while it gives the CEC management a co-ordination role it requires that the legislation and regulations governing the "normal" operation of the establishments be obeyed. In other words, it does not create any power of decision at the level of the Centre's management, which derives its authority solely from the establishment's willingness to co-operate(1). Each establishment, for example, has its own budget and its own rules for staff recruitment, remuneration and service. The CES, however, has a special status; the director of the Centre is its Principal and is therefore responsible for this establishment vis-à-vis the regional educational authorities.

98. The organisation chart of the CEC (see Figure 7) calls for the following remarks.

The difference between associate and integrated establishments(2) is mainly bound up with their respective involvement in decisions regarding the common life of the Centre; for the former, their specific objectives - which are more specialised - take precedence, the Centre being for them mainly an accommodating structure. The integrated establishments, on the other hand, all have administrative and/or financial links with the local community (the municipality of Istres), whereas the associate establishments have none and come directly under their relevant government departments.

The CEC management (director and administrative officer) has its own resources in staff, offices and meeting rooms. In addition the municipal authority delegates to it responsibility for preparing and implementing the budgets of each of the municipal establishments. The restaurant, managed by the CEC, and the reception and information services are joint services linked to the co-ordination function.

There is an open or latent tension between the dependence of the establishments on external authorities (i.e. outside the CEC) and their integration in the common life of the Centre. From this standpoint, a distinction has to be drawn between:

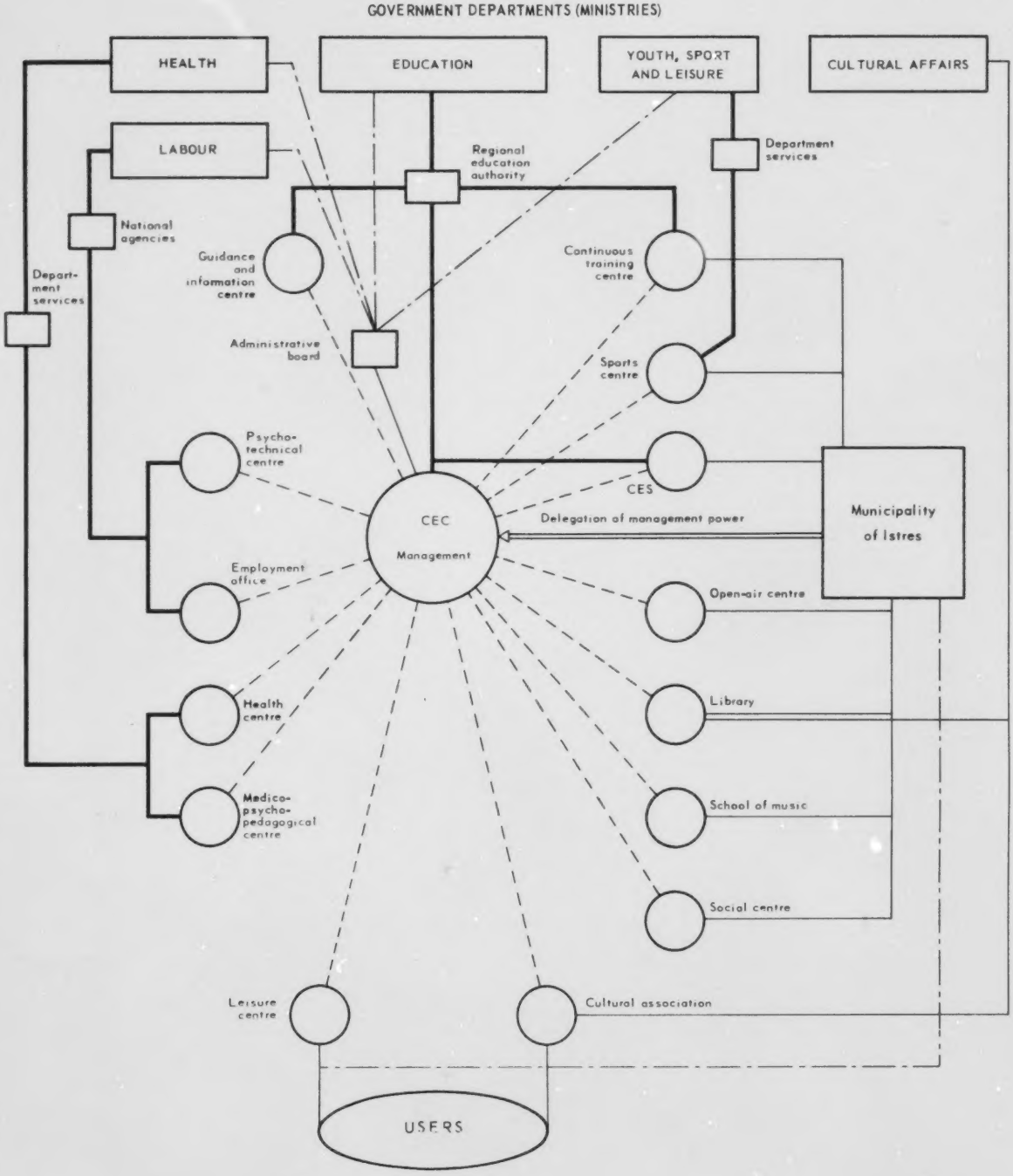
- those establishments depending mainly or exclusively on a government department and subject to the requirements of national policy;
- those depending on the municipal authority, in closer contact with the life of the community; this however does not mean that its policy always coincides with that of the CEC; these establishments have a fair measure of latitude in adapting to local needs;
- those managed by an association of users (with the participation of the municipal authority, and enjoying relative independence;

1) The convention does, however, institutionalise this co-operation.

2) The former are represented on the lefthand side of the chart, the latter on the righthand side.

Figure 7

ORGANISATIONAL CHART OF THE CEC



the sponsoring authorities nevertheless retain the right of a posteriori scrutiny.

The social centre still comes into the second category but is evolving towards the third. The effects of co-ordination on the operation of the establishments seem to increase the more autonomous they are and the less they depend on an authority outside the CEC(1).

There is an administrative board made up of representatives of the government departments and services concerned under the chairmanship of the Préfet of the region. It serves as a consultation and arbitration mechanism and may help to reduce certain tensions. In actual fact, it is fairly remote from the concrete problems of co-ordination, despite the attention paid to the CEC by its Secretary General.

Co-ordination Mechanisms

99. Co-ordination meetings are held in order to co-ordinate activities and the use of facilities; two types are held:

- a weekly meeting on co-ordination of the integrated facilities devoted to an exchange of views and urgent material problems; this is followed by other meetings involving two or three establishments affected by this or that type of concerted action;
- a six-weekly co-ordination meeting of all the CEC establishments.

Co-ordination on a continuous basis is provided by the CEC management (the CEC's director and administrative officer who, incidentally, are also director and bursar of the CES). The administrative officer centralises applications for the use of spaces and arranges for their allocation.

100. In view of the institutional aspects to which reference has already been made, these co-ordination mechanisms are continually confronted with the rationale of the decisions of the various establishments on the one hand and with that of the policies of the bodies they come under on the other (sponsoring ministries, external services, agencies, etc.) and lastly with the policies of the local authorities or municipalities. Experience seems to suggest that, whilst this situation may have a limiting effect on the independence and co-ordinating power of the CEC, its complexity, nevertheless, provides new fields for manoeuvre and initiative.

Organisation of Management

101. As regards equipment, a system of management is now developing; someone is responsible for each category of equipment. The library

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1) In practice although, the various types of autonomy and dependence - whether defined in financial, administrative or ethical terms - do not necessarily overlap.

documentalists are responsible for the audio-visual equipment and there is someone responsible for duplicating work for the whole of the CEC. There is no storekeeper responsible for all equipment.

102. The problem of distributing service charges among the buildings had not been foreseen in advance. Although there are some subsidiary metering points, a more complete network of meters would seem necessary, at least as far as electricity, telephone and central heating are concerned. As regards the telephone, the system of a single switchboard was chosen but costs are distributed on an apparently arbitrary basis. In general, the breakdown of service charges is made in proportion to floor area.

103. The reception building is managed on a co-ownership basis. This building houses the following establishments: the health centre, the medico-psycho-pedagogical centre, the guidance and information centre, the local section of the national employment office, the psycho-technical centre of the adult vocational training agency, the social and reception centre, and the nursery.

104. Each establishment is managed separately under the authority of its head, except for the common parts for which there are special rules:

> The CEC administrative officer is responsible for managing common parts and service charges. The terms of this management and the decisions regarding it are the responsibility of a board for the reception building on which a representative from each establishment serves in addition to the CEC administrative officer. This board draws up the internal regulations.
>
> "The establishments exercise their co-ownership rights either under their own names (adult vocational training agency, national employment office); or in the name of the territorial authority to which they are attached, i.e. the community development syndicate for the new conurbation north-west of the Etang de Berre (social and reception centre, nursery), the Bouches-du-Rhône Département (health centre, medico-psycho-pedagogical centre) or the central government (guidance and information centre)".(1)

The "private" parts are those reserved for or allocated to the exclusive use of each owner. The common parts are those allocated to the use or benefit of two or more co-owners or all the co-owners. The common parts

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1) Internal regulations for the reception building, 6th June, 1974.

form an indivisible property owned by all the owners in the proportions set out in the descriptive statement governing their distribution. The common parts and the rights attaching to them cannot, separately from the private parts, be made the subject of a court case for division or compulsory auction.

105. The management of the holiday camp, now under construction, will probably be on a commercial basis. It is still not known whether the municipality would like to set up direct management or have the camp managed through an association. The restaurant is run by municipal staff coming under the administrative officer.

106. In this connection it is important to note that, at Istres as in other co-ordinated complexes in France, there are special arrangements amending the usual rules as regards the management of the CES. In view of the relatively slender resources of the municipalities and the French tradition that the cost of education has to be borne by the State, running costs in the Collèges d'enseignement secondaire (service staff, electricity, heating and other charges, and pupils' meals) are met by the central government. The phrase used is the "nationalisation" of the CES. In Istres, the CES is not "nationalised" and costs are therefore borne by the municipality which receives a compensatory subsidy from the government. This measure is designed to mitigate the disadvantages of nationalisation in cases where a CES is included in a co-ordinated complex. The point is that with nationalisation a CES is run directly by the government and this would not be coherent with the management of the other facilities, which is the responsibility of the municipality. In particular, in the case of nationalisation, the use of school facilities for community activities is not a matter for decision by the local authority; similarly, the service staff of the CES (including the kitchen staff) is in this case composed of central government employees (whereas the other facilities are maintained by municipal employees) and its responsibilities are restricted to services related purely to school use of the facilities. Thus, in this special case of "non-nationalisation", the distribution of charges between the municipality (40%) and the government (60%) is the same as in the case of nationalisation, but management is more flexible and better suited to the problems of co-ordination. The system, however, has two limitations: first, it is an exceptional measure and thus requires a specific decision so that its general application to similar cases is not a foregone conclusion, and second, because the compensatory State subsidy is decided as a lump sum; it is affected by inflation and its readjustment is in no way automatic.

107. Management difficulties, although not currently experienced as major obstacles to co-ordination, reflect the ambiguities of the integration process in the present structures. Everyone agrees on the need for clarification and analytical accounting. But the criteria for distinguishing or combining the management units (by buildings? by establishments? by type of activities?) that would best correspond with the objectives of co-ordination have yet to be defined.

CONDITIONS OF USE

System of Exchange between Establishments

108. The use of facilities is covered by a relatively complex system of exchange among the co-ordinated establishments of the CEC. These exchanges relate mainly to three fields.

109. Services. Because of the combined wealth of resources and skills assembled at Istres, each establishment can have the benefit of the possibilities offered by the others and thus make better provision for some of its activities than it could do on its own, or supplement those that it organises. For instance, the library provides services to other establishments which could not, were they in isolation, organise a library for their own use. This exchange offers a twofold advantage: savings in resources and higher quality of service.

110. Organisation of joint activities. Some activities are taken on by two or more establishments. They may be occasional (public performances, exhibitions, seminars) or regular activities. An illustration is the organisation of the "Friday workshops". Every week the CES offers optional activities to its pupils enabling them to explore a field of interest, develop a special skill or have the benefit of guidance and advice. More than 50 different possibilities are offered. The CES is not in a position to handle them all and several establishments (in particular the library and the leisure centre) join it in order to put this organisation into effect. It is a type of activity which a CES limited to its own resources (and its own facilities) would be unable to organise without major extra cost. At Istres the extra cost, if any, is slight.

111. The facilities. Each institution (establishment) with its own facilities puts them at the disposal of the others according to needs and to suit the overall organisation. This exchange is affected by a number of constraints and depends on several factors. It does not apply to all the facilities since each establishment reserves some of them for its own

exclusive use. The needs of the other establishments are often ranked second (non-priority) by the "lending" establishment. There is more demand from the various establishments for specialised accommodation but that for general-purpose facilities (not assigned to any specific purpose) is also high because of the need of all establishments for meeting rooms.

112. Table 6 sums up the system of exchange that has just been described. The table should be read in the following way:

- the establishments down the lefthand side (1 - 14) are applicants vis-à-vis the establishments across the top (a - n);
- each line thus shows what each establishment seeks from the others;
- each column shows in turn what each establishment provides.

113. It can be seen that:

- the CES is the biggest provider of accommodation (18);(1)
- it also has the biggest involvement in joint actions with the other establishments (18);
- the social centre (14) and the library (9) provide the most "services" to the other establishments;
- the school of music - no doubt because of its specific nature and its late arrival in the complex - is relatively isolated supplying no services and requesting few; in contrast, the open-air centre (children's recreation), though offering few services to the other establishments, is a big applicant in terms of both accommodation (9) and services (8).

114. There are, in fact, two sub-sets of establishments (1-8 and 9-14). Co-ordination is more effective within each sub-set than between the two sub-sets. The CES, the recurrent education centre, the guidance and information centre and the social centre lie, however, at the point where the two sub-sets hinge together. As far as co-ordination is concerned, therefore, there are three groups of establishments:

- those in the educational and cultural sector which have preferential links of co-ordination between them;
- those in the social and employment sector which also have more intense relationships between each other than with the remainder;
- those which are astride these two sectors and therefore perform a particularly important role in co-ordination.

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1) A score has been awarded to each establishment on the following basis: "very frequent exchange" 3 points, "frequent exchange" 2 points, "occasional exchange" 1 point.

Table 6

DIAGRAMMATIC PRESENTATION OF THE SYSTEM OF EXCHANGE BETWEEN ESTABLISHMENTS

ESTABLISHMENT \ DEMAND	a CES	b Library	c School of music	d Open-air centre	e Sports centre	f Leisure centre	g Cultural association, Fos new town	h Social centre	i Health centre	j Medico-psycho-pedagogical centre	k Adult vocational training agency	l National employment office	m Continuous training centre	n Guidance and information centre
1. CES		▲ ●			▲ ●	▲ ◍	△ ▨	△ ▨	△	□	□	▨	▲ ●	▲
2. Library	▲ ●					△ □	△ □							
3. School of music	◍						□							
4. Open-air centre	◍	▨			● ■	◍		□	□	□				◍
5. Sports centre	▲ ●	□				▲ ■	□	□					▨	
6. Leisure centre	△ ◍	△ □			▲ ●		▲ ■	△						□
7. Cultural association, Fos new town	△ ▨ ◍	△ □			○	▲ ■		△ ▨ ◍			○		△	
8. Social centre	△ ▨ ◍	□		□	□	◍			▲ ●	▨	△ ▨	△ ▨	□	□
9. Health centre	△							▲ ●		▨				
10. Medico-psycho-pedagogical centre								▨	▨					
11. Adult vocational training agency		□						△ ▨				▲	△	△ ◍
12. National employment office		□						△ ▨			▲		▲	△ ◍
13. Continuous training centre	△ ◍	□			▨		△	□		□	△	▲		▨
14. Guidance and information centre	△					□		□	▨	□	△ ◍	△ ◍	▨	

FORM

- □ Services
- ○ Facilities
- △ Participation

SHADE

- ■ Very frequent
- ▨ Frequent
- □ Occasional

115. This system of exchanging services and the organisation of joint activities has its effects on staff duties. It will be noted that:

- the CES teachers are involved in the activities of the recurrent education centre, the leisure centre and the library;
- the "animateurs" of the leisure centre and of the cultural association are involved in the CES, the library, the open-air centre and the school of music;
- the "animateurs" of the sports centre are involved in the sports activities of the CES and of the recurrent education centre;
- the staff of the library are involved in the activities of the CES, the open-air centre, the recurrent education centre, the guidance and information centre and the other establishments for documentary support;
- the staff of the social centre provide reception services for all the establishments and are involved in specific activities in the recurrent education centre;
- the staff of the health centre have a reception and guidance role vis-à-vis the adult vocational training agency, the open-air centre and the national employment office;
- the staff of the open-air centre have a reception and guidance role vis-à-vis the health centre.

Moreover, the reception function tends to take the form of a network: the social centre has the primary reception function but all the other establishments tend to perform a secondary reception function.

Various Categories of Facilities

116. On the basis of the system of exchange described above, the CEC facilities can be split up into three major categories in relation to the type of use-management.

i) Reserved facilities

117. Reserved facilities are those which the establishments use for their own purposes, for activities which are specific to them and in particular for their "logistic" activities (management, organisation, storage, etc.). This relates mainly, therefore, to:

- offices
- stores, repair shops (e.g. the library)

- consultation facilities (e.g. the guidance and information centre, the health centre, the adult vocational training agency, and the national employment office).

ii) Shared facilities

118. Shared facilities are those open to several categories of user although they are attached to a given establishment(1).

An establishment responsible for facilities may take primary responsibility for the activities that take place in them. On that basis the establishment may be considered to have different "clients" coming either from other CEC establishments, from outside groups or institutions (clubs, associations, etc.), or from the public freely visiting the Centre. A good example is provided by the use of the library; it receives a very varied public: children, CES pupils, adults of all age groups and all types(2); but its staff "takes charge" of users even when they come in organised groups, e.g. children from the open-air centre or CES classes coming to work with their teachers. Offering its services in this way, the team responsible for the library proposes, not to say imposes, a certain conception of reading practice but also a relatively codified way of using the facilities and the furniture.

The establishment responsible may make its facilities available to other establishments on the basis that they take responsibility for the activities with which they are concerned and, of course, for the use of the facilities during the time they are allocated to them. An illustration of this type of use is provided by the art/craft workshops as a whole (some of which are attached to the leisure centre and the others to the CES). Practically all the establishments in the Centre use them (apart from the library and the sports centre) and although the establishments to which they "belong" consider themselves to be responsible for them (keys, organisation, etc.) the joint administration service plays an important part - sometimes equivalent to direct management - in providing for their maintenance and supplies.

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1) The establishment is responsible for the facilities and regards them as being its own by right (see paragraph 33).

2) During the test week in December 1975 the library was visited by 1 100 children, 1 535 CES pupils and 1 072 adults making a total of 3 710 (an average of 618 a day).

Table 7

OCCUPATION OF ART/CRAFT WORKSHOPS BY THE VARIOUS ESTABLISHMENTS DURING THEIR REGULAR ACTIVITIES

Number of sessions (equivalent to one half-day) per week for a group (from 10 to 30 persons)

CES	72
Leisure centre	20
Recurrent education centre	15
Open-air centre (children's recreation)	7
Social centre	4
Total	118

119. On the basis of full-time utilisation (from 9 a.m. to 11 p.m. each day) this represents a rate of occupation of 55 per cent but account has to be taken of the distribution of demand during hours which makes certain periods of little use (see below) and of the free activities when the workshops are visited by various publics (and in particular the CES pupils who have the right to go there when they have no classes, but also by certain residents in the new housing areas who come in order to make certain articles they need to fit out their homes). It should also be noted that the CES (whose pupils account for only three-quarters of its theoretical capacity) would, if it had only its own workshops according to the standard schedule, use them for 100 per cent of school hours. Since such conditions would be untenable in practice, it may be said that it is thanks to the additional facilities provided that the CES is able to carry out its activities and in particular promote one of the most original of them (not included in the official curriculum); namely the optional workshops (see above paragraph 110).

120. The CES classrooms, which are also "lent" by the CES to the other establishments, constitute a totally different example of this same category of facilities. For one thing they are not specialised and are therefore suitable for more general activities and can be used for adult education courses and various types of meeting. For another, they are encumbered as it were by their school use which, in the general view of the public, teachers etc., corresponds to reserved activities, hardly compatible with using the rooms for a different purpose. In fact, little use is made of them /6 out of 28(1) are used regularly for non-school activities/.

121. The science rooms are used very little for non-school activities (3 rooms for a total of 12 hours a week). This may possibly be due to

1) This proportion has almost doubled in 1976 as a result of the increasing activities of the school of music and of the recurrent education centre; these figures do not take into account the use made of these rooms by the open-air centre in the summer (cf. Table 9 and paragraph 135).

their relative isolation, but far more to the fact that they are more "preserved" still than the others by their usual occupants, and that demand is very low from the non-school public in relation to the activities that they normally accommodate. And yet some rooms would lend themselves very well to various practical activities and could easily supplement the workshops, for example. So far, however, no effort seems to have been made to find further uses for these facilities which are fully utilised during school hours but available outside them.

122. The sports facilities belong to both sub-categories of shared facilities. The team of "animateurs" does its best to staff the activities that take place there but the capacity of the facilities exceeds the team's staffing possibilities and many groups come with their own supervisors or coaches (CES classes, outside sports clubs, etc.). There is a sort of common conscience among the users of the sports facilities reflected, in particular, in their general acceptance of fairly strict and formal rules of use, so that the team responsible for the facilities is able to keep a fairly close check on their use.

123. Some rooms, however, and in particular the fencing room and combat sports room, are used far more freely by the various groups visiting the CEC and are used for many activities of the Centre's other establishments. The sports facilities are the most intensively used of all the facilities of the Centre. Some examples: the indoor swimming pool is used 88 hours a week (27 hours by school pupils); the gymnasia are used an average of 65 hours a week each (34 hours by the CES). During the test week in December 1975 the sports facilities had 5 015 users (an average of 716 a day) made up of 2 302 children, 1 833 CES pupils(1) and 880 adults.

iii) Joint facilities

124. Joint facilities are those not allocated to any establishment in particular, responsibility for them lying with the management team. To some extent they are used as specific co-ordination resources. They consist of:

The management facilities (offices, archives, common duplicating centre). They are in fact reserved facilities /see category (i) above/.

The facilities made available to all and run by the management: two meeting rooms; the encounter rooms and the auditorium (for the

1) The 850 CES pupils all took part in more than one sports activity.

use made of these see table 8). Special mention should be made of the restaurant, run by the management, which is a "joint service" that can be used not only for the Centre's internal requirements but also for receiving outside groups (meals, receptions, galas, etc; an average of 5-10 events a month depending on the season). Its use goes beyond school requirements (7 300 meals served per month on average including 6 000 for the CES pupils and their teachers) but is still far below what it could be.

The rooms for free use, permanently open to everyone, mainly: the reception halls and internal circulation areas. One of these halls is the central reception point (receptionists, telephones, meeting areas) and has a cafeteria which is full of life. The many halls in the Centre are far from performing the same function or corresponding, in every case, to the intentions of the designers. The fact is that they have a tendency to be closed-in or to be appropriated for special purposes - one has been transformed into a general activity room - or else to stay empty.

125. Table 8 calls for the following comments:

The breakdown of uses made shows that the multi-purpose nature of the facilities, though real, never rules out some measure of specialisation (group activities in the meeting hall, exhibitions in the encounter room, public performances in the auditorium).

Co-ordination gives rise to needs of its own which are far from negligible as well as to a whole series of activities (meetings, numerous working sessions, consultation and planning).

The figures expressing the extent to which the facilities are occupied should be interpreted with care because they do not correctly reflect the reality of life in practice. Indeed:

- the management's schedules take no account of the spontaneous use of facilities; this applies in particular to the auditorium which is a fairly lively social area;
- the objective of full-time use should be seen in the light of real demand; more careful scrutiny, for example, shows that, for the encounter room, three out of four sessions take place between 2 and 8 p.m. so that the rate of occupation in that part of the day is about 90 per cent;
- these rates ought to be compared with those for corresponding facilities in an ordinary CES where there is no non-school use.

Table 8

USE OF CERTAIN JOINT FACILITIES OF THE CEC(1)

Unit of account: two-hour, three-hour or half-day session during which the room is occupied by the users of activities concerned.

	Meeting room (1st floor, administration block)	Encounter room (ground floor, administration block)	Auditorium (education block)
Theoretical number of possible sessions a month (assuming full-time use from 8 a.m. to midnight daily)	90	90	46(2)
Average number of sessions a month	20	42	8
Theoretical average rate of use	22%	47%	17%
Breakdown of sessions (100%) by type of users			
Associations or groups outside the CEC	22%	13%	42%
CES	33%	17%	(2)
Other CEC establishments	33%	66%	42%
CEC co-ordination	12%	4%	16%
Breakdown of sessions (100%) by type of activity			
Working groups	48%	10%	
of which : organisation	33%		
evaluation	15%		
Discussion groups	23%	6%	
"Animation" activities	11%	2%	
Training activities	11%	8%	(2)
Public performances (theatre, cinema)			68%
Concerts and rehearsals		6%	11%
Assemblies and receptions		10%	16%
Conferences and information	7%	6%	5%
Exhibitions		52%	

1) Source: Schedule for the use of facilities by the secretariat of the CEC general management.

N.B.: It should be remembered that these facilities become joint facilities only as a result of co-ordination since administratively they form part of the CES schedule of accommodation.

2) The figures for the auditorium do not take into account school use (drama, French lessons, informal activities), nor the use by the open-air centre on Wednesday afternoons (games and public performances).

Establishments without Facilities of their Own

126. One of the original advantages of the system shows up in the existence of establishments which have no facilities of their own, and which organise all their activities, therefore, in facilities belonging to other establishments or in the joint facilities. There are three such establishments:

i) The open-air centre (see Table 9)

127. The open-air centre - a recreation organisation for young children - takes in 750 children aged 4 to 15 coming from Istres and certain neighbouring municipalities. It operates at different intensities in the school year (every Wednesday afternoon between November and June) and in summer (full-time every weekday in July and August). The open-air centre also looks after the training of its "animateurs" (young adults and older CES pupils - about 70 people in all): two days a month involving meetings and group activities in the pupils' social area. The centre has the permanent use of two rooms provided by the guidance and information centre (which cannot fully use its facilities and provides offices to other organisations); these rooms therefore in fact constitute "reserved facilities" for the open-air centre (office and store).

ii) The social centre

128. The social centre has contributed a net area of about 500 m^2 to the programme. In fact the major part of the corresponding facilities constitute joint accommodation (see paragraph 124): the offices of the management and of two other establishments; duplicating centre and archives; reception hall and cafeteria. The social centre therefore retains only a small part for itself: office and reception room, on-duty office (where outside social services come each week to provide information and advice) and a multi-purpose room for various groups and children in particular. Lastly, although managed by the social centre, the nursery receives 40 children on a continuous basis - whose parents are temporarily busy in the Centre - and in fact performs the role of a "joint" facility. The major part of the activities of the social centre are therefore accommodated in the "shared" facilities of the other establishments or take place outside the CEC.

Table 9

BREAKDOWN OF ACTIVITIES OF THE OPEN-AIR CENTRE

	Activity	Number of groups (from 15 to 30 children)	Facilities Used
School year: Wednesdays from 1 to 5 p.m.	Swimming	3	CEC pool
	Sailing	1	CEC nautical centre
	Horseriding	2	Outside the CEC
	Fencing	3	CEC fencing room
	Tennis	3	CEC courts
	Rugby	1	Outside the CEC
	Reading club	1	CEC library
	Cinema	3	CES classroom
	Enamelling, pottery	2	Workshops
	Crafts	4	Workshops and art rooms
	Cookery	1	Workshops
	Open-air games	10	Pine forest, playgrounds
Summer: every day from 8.30 a.m. to 6.00 p.m.	Same activities	Smaller number	
	In addition:		
	group activities	12	CES ground floor classrooms (each group having one room as its social base)
	Rest period for very small children	3	3 CES classrooms specially arranged for the purpose
	Meals (3 per day)	300 children	Restaurant
	Loan of books	-	Library
Occasional	Public performances for children (one a month on average)	600 children	Auditorium

iii) The cultural association

129. The relatively large team of this association has, for the time being, no facilities of its own. The social centre and the CES provide an office and a store. It therefore uses the joint facilities (in particular the auditorium) for its activities (public performances,

concerts, "animation" sessions) many of which also take place outside.

130. It can be seen, therefore, that grouping the facilities enables greater use to be made of the whole complex, in quantitative terms, than would be possible if the various facilities were provided separately. The use made of them is also - and above all - much more varied. The possibility of accommodating institutions which have no facilities of their own therefore illustrates the larger quantity of services that can be provided by co-ordinating facilities. Nevertheless, it will be necessary to keep a careful watch on what happens to the status and role of the cultural association in the co-ordinated complex when - in the near future - it receives its own facilities (the theatre and ancillary accommodation now being built, to be run jointly by the association and the leisure centre). The CEC is currently debating on how these new resources will operate and on the effects of their management and their nature in terms of a possible decline in the use of the auditorium, a possible identification between the institution (the cultural association) and its facilities, and the danger of a specialisation of these facilities in the event that their multi-purpose nature should prove to be unreal or insufficiently assumed.

Use of Facilities and the Time Factor

131. The co-ordination of school and non-school facilities has no significance until a time-scale is introduced. The effects of co-ordination in terms of variations in rythms and the differences in the organisation of activities to suit the various publics or the various establishments make time the determining factor in the use of the facilities. This is clear from a study of the way the Istres CEC works.

i) Differences in rythms as between school and non-school activities

132. Community activities, to the extent that they mainly concern adults whose participation is voluntary and who are subject to the constraints of working and family life, cannot be planned in the same systematic fashion as school activities. They have to be fitted in at the most favourable times of the day, days of the week or periods of the year. They are thus subject to variations in rythms which depend only to a small extent on the organisational system of the Centre. In contrast to the school public, whose attendance is governed by the organisation of school life, it is in this case the organisation which has to be adjusted to suit the rythm of demand. The most direct consequence, as regards the use of facilities, is that there are "peak periods" when the facilities may appear to be inadequate and periods of low demand when they appear to be in

excess. The rates of use of facilities and the extent to which they match real needs therefore have to be assessed in relation to the rythm of demand and in particular to what happens when the demand is at its highest (the peaks). In Istres, the facilities most affected by this problem are the joint facilities and the art/craft workshops.

ii) Priority uses

133. Each establishment tends to meet its own requirements before those of the other establishments and therefore to reserve the facilities it controls for its own use at those times which seem most suitable. The co-ordination between establishments makes negotiation possible, which introduces some flexibility in this practice but there are some sectors with no organisational flexibility, the school establishment being the most blatant example. The organisation of school time is codified by external constraints or objective needs (school transport) and is therefore never questioned. The result is that the use of school facilities for non-school activities is possible only at those times left over from school use, the priority of which appears to be sacred. However, the tradition of "the lighted schoolhouse" no longer corresponds with reality and the need for non-school use during school hours is becoming more and more apparent.

134. At Istres, for example, the recurrent education centre accommodates three full-time long-term training groups (50 young people unemployed, 25 candidates for places in nursing schools and 20 future municipal employees); for staff already employed by firms, it organises training sessions which take place during working hours (and therefore during school hours). Since it has only two language laboratories and one meeting room of its own - which, incidentally, it shares with the CES - its requirements as regards rooms are considerable whereas the availability of the CES facilities at the relevant hours is low. Since the priority of the CES cannot be questioned there has, so far, been no real study of the more rational organisation of time and patterns of use of the accommodation. The solution envisaged at the moment is to build new facilities for the recurrent education centre which, like most establishments, has a tendency to increase the volume of its own facilities. But the need would remain to consider carefully how to define the minimum additional facilities required in order to resolve the situation without threatening the benefits arising from the co-ordination of activities and the mixing of publics, or generating a corresponding under-utilisation elsewhere.

iii) Alternation of rythms between summer and winter

135. An important aspect of the operation of the Centre lies in the considerable difference between those periods when the school establishment

is functioning and the periods of school holidays, particularly when this coincides with a difference in season (July-September summer holidays). During this latter period the school facilities are obviously under-utilised whereas activity in the sports and leisure facilities increases. Partial use is made of the school premises: the children from the open-air centre use the ground floor classrooms in the education block (after rearrangement) and also the auditorium. More intensive use of the educational facilities during this period does not seem to be envisaged primarily because they continue to be marked by school life, even when this is suspended and secondly because they offer little scope for the leisure activities that could then be organised. The children that use them for lack of anything better find no way of appropriating or decorating the space or of creating the intimate and comfortable environment which a social base for a group requires. But the institutional aspects of the summer/winter contrast seem more important: in summer co-ordination problems take a very different form because they no longer concern the school but only the non-school establishments. The holiday period is long enough for specific attitudes to develop both among the public and those in charge and their perception of the school and life in the Centre changes. The change that can be noticed when the pupils return to school is sufficiently abrupt not to say violent, to affect the resumption of "normal" co-ordination. A last point is that, during the summer period, the "centres of life" shift from the main entrance and the mall to the area near the cliff (swimming pools, sports halls and restaurant) so that the main reception point is deprived of its function. These comments confirm the need to look for a second reception point for that period and to maintain many different access points to the CEC.

The Use of Facilities Outside the CEC

136. A tendency is forming to carry on activities in places or facilities outside the CEC and at the following in particular:

- public open-air places in neighbouring municipalities for the activities of the cultural association, the open-air centre and the leisure centre;
- residential community facilities in the concerted development zones for the activities of the social centre, the health centre, the library and the leisure centre;
- industrial firms and workplaces for the activities of the employment office, the adult vocational training agency and the recurrent education centre;

- residential premises for the activities of the social centre and the health centre;
- outside school establishments for the activities of the social centre, the national employment office, the guidance and information centre, the library and the school of music.

The Use of Multi-Purpose Facilities

137. Some facilities accommodate different types of activity but at different times: the multi-purpose room of the social centre, the joint meeting rooms in the CES, the CES art rooms, the CES craft workshop, the gymnasia and sports halls and the auditorium. Needless to say various types of meetings can be held in the meeting rooms.

138. An interesting point is that the multi-purpose principle often creates a demand for storage space. A change in the use of the CES art/craft workshops or those of the leisure centre can be made only for a long period. For instance, it is impossible to transform daily or weekly a modelling or pottery workshop into an enamelling workshop if there are no storage facilities. Conversely, one and the same workshop can be very quickly switched from weaving activities to basketwork or clothes-making (activities which involve no storage problems). However, when weaving activities reach a high technical level, the problem of the specialisation of facilities reappears primarily because of the "fragility" of the work done and the equipment used.

139. The study of the CEC in operation shows that the multi-purpose nature of its facilities is relatively limited. In the facilities where it is most apparent it is often linked with a certain indetermination as regards vocation of these facilities, the solidity of their furnishings and fittings (e.g. the auditorium, the multi-purpose nature of which seems to be the most developed) and the availability of a differentiated range of furniture (the encounter hall). Conversely, furniture considerably restricts the use of teaching areas, the multi-purpose nature of which is not very developed. As has been seen, however, some degree of specialisation does not rule out the multi-purpose principle (although it narrows down the range of possible activities) except in the following cases:

- use of highly specialised equipment (pottery and photography);
- exclusive appropriation by one group for only one activity (modelling);
- special conceptions of the specificity of certain activities (science and, particularly, technology rooms the real multi-purpose nature of which is not being exploited)(1);

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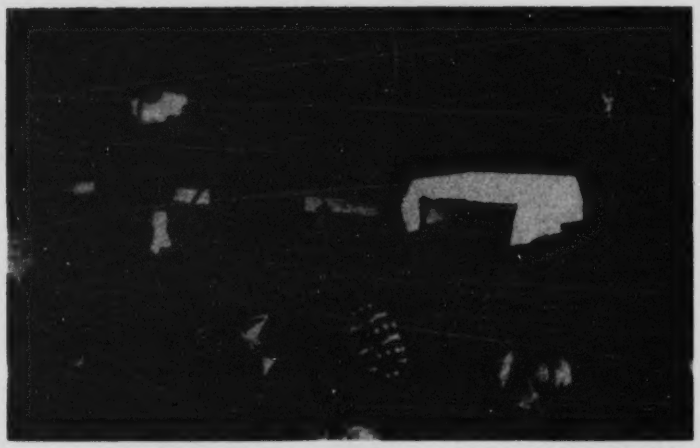
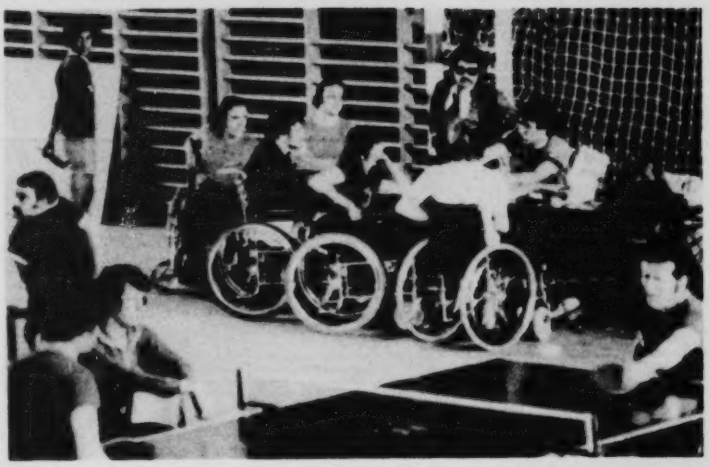
1) As regards the latter, the main reason for their under-utilisation lies in the fact that they are spatially dissociated from the workshops (cf. paragraph 121).

DIFFERENT TYPES OF USE OF FACILITIES : DIFFERENT ACTIVITIES, DIFFERENT PUBLICS — THE EXAMPLE OF THE INDOOR SPORTS FACILITIES



CEC Management of Istres

Used for a public performance



Championship for physically handicapped

Exercise in body self-expression

CEC Management of Istres

- need for long periods of idle time (when no use can be made of the facilities) for rearrangement, internal transformations and maintenance (e.g. the sports halls used for parties and public performances).

Final Comments on the Use of Facilities

140. Seen from the viewpoint of the public - and not from that of organisation and management as has been done up to now - shared use (between non-school and school users) holds a big lead over joint use, in other words the different users are accommodated in the same facilities much more often successively than simultaneously. Apart from public performances or parties in which there is a broad mixing of publics in the same place, the only facilities used simultaneously by school and non-school publics are the library and art/craft workshops (woodwork and metalwork and home economics)(1). In the former the relative incompatibility between the structured activities of pupils doing documentary work and the freer activities of adults or very young children is overcome by the relative independence of the reserved areas within the one volume and by the de facto acceptance by all users of a pattern for using the accommodation to which reference has already been made (in Grenoble, however, these incompatibilities were not overcome and a physical and institutional separation between the school and non-school parts of the mediathèque had to be introduced). The co-existence of different groups in the art/craft workshops does not present any major difficulty.

141. As institutional structures, the establishments are to a large extent the "compulsory channel" of access by the public to the Centre's facilities. In other words, people come to the CEC mainly as a CES pupil, a member of the leisure centre or the social centre or a reader registered with the library, and far less on a free and non-formal basis. During the test week in December 1975 6 868 "permanent users" were counted (those registered with one of the establishments) as against 4 316 "occasional users". Of the latter there were about 1 000 people applying for services, i.e. consulting one or several of various social services, and due account has to be taken of the fact that numerous events and parties took place during that week to which the public was free to attend. A fair estimate, therefore, would be that two out of every three users come to the CEC via the establishments. It is difficult to assess the significance of this figure and it is probably more important to point out that "independent participation" has increased appreciably since the CEC was opened. It may, nevertheless, be noted that this institutionalisation is specific to the Istres CEC. It is

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1) This also applies to the language laboratories during "self-service" periods.

reflected in the excellent way in which conditions of use are regulated but it also means that participation stems more from functional causes (linked with the activities) than from sociological ones (linked with the actual groups in the community).

142. The internal factors which appear to limit most of the more intensive use of the facilities by various publics include:

- those concerning the perception the public has of the Centre itself (in which the image of school - although weighted nowadays - is still predominant) and certain of its establishments or their activities which remain closely associated with specific premises;
- those concerning the behaviour of groups and institutions tending towards close control over the facilities by their regular users; some groups for example (modelling) identify themselves so completely with their main activity that their often exclusive appropriation of the facilities stems less from their anxiety to protect their work than from the affective value they give to the place where they do it;
- those related to objective reasons (the nature or location of the facilities) to which reference has already been made; one additional point is worth noting: the technical standard or the specificity of facilities which there is a tendency to reserve for competent users seems to be less of a limitation than the vulnerable nature of what is produced in them and which has to be left there for long periods; the photographic laboratory, for example, is more "open" than the weaving shop.

THE USERS OF THE CEC

143. The CEC activity report dated 30th December 1974 gives the following numbers of users:

ADULTS		CHILDREN	
June 1973	December 1974	June 1973	December 1974
1 010	3 006	3 730	7 663

In addition, a systematic and very careful count of all CEC users was made during the week 1st-7th December 1975 and gave the following results.

	Adults	Children	Total
Integrated establishments	3 968	6 237	10 205
Associate establishments	770	209	979
Total	4 738	6 446	11 184

On the assumption that 10 per cent of the adults involved and 25 per cent of the children took part in more than one activity during that week, the total number of users in contact with the CEC during one week amounts to 9 100 (4 265 adults plus 4 835 children). A more detailed analysis of the findings of this survey shows the high level of attendance by children, the predominance of sports activities, and the increase in occasional users - that is to say those who come for a "one-off" activity. Clearly the CEC is increasingly performing the role of a place of encounter.

COST EVALUATION

144. Table 10 shows the amounts actually spent (including taxes) for payments effected by January 1975. In the case of Istres, a cost comparison between co-ordinated and separate facilities would be pointless to the extent that each facility in the complex was separately financed in the same way as the building of any facility (see paragraph 67). Administrative control was therefore exercised facility by facility and the payments did not exceed what was allowed by the regulations. No cost analysis, however, was made and it is therefore impossible to say whether additional costs were involved as a result of the modifications made to the standard plans. If there were any, then the building enterprise bore them. Incidentally, this firm displayed a considerable measure of goodwill, the Istres project being very important to it.

145. Table 10 calls for two comments:

The identified additional costs include those for the improvements made to the plans (second phase) for the leisure centre, amounting to FF 14 258. But this was not due to co-ordination itself, this type of modification being a frequent occurrence in this sort of facility whether co-ordinated or not.

Costs for landscaping were not fully covered by the corresponding amounts in the building contracts. The planting of trees and the layout of the mall were at a level that is never provided when facilities are built separately. Again, the CEC site is extremely large

Table 10

CONSTRUCTION COSTS (BUILDINGS, ROADWORKS AND OTHER NETWORKS)

Facility	Area (in m^2)	Total Cost (in French francs)	Cost per m^2 (in French francs)	Date of Price
CES, total of which	9 310	6 185 368(1)	664	Jan. 1970
- education	5 008	2 981 740	595	- " -
- housing	641	475 138	741	- " -
- workshops	1 110	825 673	743	- " -
- dining, kitchen	1 525	896 909	588	- " -
- administration	1 026	663 692	646	- " -
Leisure centre	692	413 570	597	Jan. 1971
Language laboratories	259	423 102	1 633(2)	Jan. 1971
Sports facilities (except swimming pools)	2 465	2 692 047	1 092	1974
Library	1 201	1 198 551	997	Oct. 1971

1) This sum includes the cost of landscaping joint outdoor areas, not accounted for in the cost of each of the parts of the CES listed.

2) Including 50 per cent of the cost of audio-visual equipment.

Table 11

COMPARISON OF AREAS BUILT, INVESTMENT COSTS AND COSTS PER M^2 BETWEEN CEC ESTABLISHMENTS AND REFERENCE ESTABLISHMENTS (AT DECEMBER 1973 PRICES)

ESTABLISHMENTS	CEC Establishments			Reference Establishments		
	Cost (in French francs)	Area (in m^2)	Cost per m^2 (in French francs)	Cost (in French francs)	Area (in m^2)	Cost per m^2 (in French francs)
Strictly comparable educational, social and socio-cultural facilities						
Library	1 536 000	1 200	1 280	2 733 633	1 490	1 834
CES	8 840 494	9 310	9 949	8 716 517	9 221	945
Social centre and nursery	792 845	593	1 337	720 443	582	1 237
Health centre	1 326 199	876	1 514	1 333 435	1 010	1 320
Guidance and information centre	583 185	592	985	588 024	651	903
TOTAL	13 078 723	12 571	1 040	14 092 052	12 954	1 088

(twelve hectares) and more car parks were provided than the total contained in the various schedules of accommodation for the co-ordinated facilities. This additional cost (not yet finalised) was met partly by the Istres municipality and partly by a grant from the national fund for improving nature and the environment.

146. A detailed study of the costs of the CEC was made on behalf of the regional authority. The method was comparative: the costs of the CEC establishments were compared with reference establishments built separately in the same region and regarded, by the administration, as complying with cost norms. The study began by comparing real total investment costs (at December 1973 prices, date of the study) and some of the findings are shown by way of example in Table 11.

147. This study proposed an interesting approach for relating investment expenditure to services provided. The approach was applied both to the CEC establishments and to the reference establishments. For this purpose, indicators were defined and a new notion - that of virtual cost - was introduced. Virtual cost is that resulting from the effects of co-ordination, the theory being that the only valid comparison, if the services provided are to be taken into account, must be between virtual costs and not between real costs (the figures given in Table 11). These indicators are as follows:

i) Virtual investment cost. The institution connected with each co-ordinated facility regularly uses more area than that provided for it by the facility (see Part Four on the use of facilities). A distinction therefore has to be drawn between the area built in the name of the facility concerned and the area that is actually available and which the institution in fact uses in its operation. The virtual cost per usable m^2 is therefore defined by the ratio:

$$\frac{\text{real cost of facility}}{\text{available area (in } m^2)}$$

In a separately built facility, real cost per m^2 and virtual cost per usable m^2 are identical but this is not so in the case of co-ordination since each facility uses parts of the others for its activities.

ii) Rate of return 1. As a result of co-ordination the facilities of the Istres CEC stay open much longer than separate facilities would. The return possible through the full utilisation of the

facilities can therefore be expressed by the following ratio:

$$\frac{\text{real investment cost}}{\text{hours open per year}}$$

The smaller this ratio, the greater the rate of return.

iii) Rate of return 2. The staff necessary to operate the facilities is another expression of the rate of return. The number of staff is therefore related to the number of hours the CEC is open per year :

$$\frac{\text{hours open per year}}{\text{number of staff}}$$

iv) Hourly operating cost. The value of this indicator is purely relative because running costs vary not only with the requirements of the establishments but also with the resources available to the community which provides the finance. Compulsory expenditure, e.g. teachers' salaries and other teaching costs which are borne by central government and do not depend on whether the facilities are co-ordinated or operated separately, are not included. The return is expressed by the following ratio:

$$\frac{\text{running costs}}{\text{hours open}}$$

148. A few examples and the findings of the study help to demonstrate the value of such cost studies.

The facilities specific to the Istres CES occupy an area of 9 310 m^2. In addition the CES makes regular use of the language laboratories (200 m^2), the library (1 200 m^2), and the art/craft workshops of the leisure centre (160 m^2), i.e. of a total additional area of 1 560 m^2. The total usable or available area is therefore 10 870 m^2 and the virtual cost (at 1973 prices) is:

$\frac{8\ 840\ 494}{10\ 870}$ = FF813 whereas the cost per m^2 built comes to FF 949 (at 1973 prices). The reference CES, built at the same time, had a real cost of FF 945 per m^2 (at 1973 prices) and its virtual cost per m^2 is also FF 945 because it does not use any areas apart from those built according to its schedule of accommodation.

The number of non-teaching staff (administration, management, secretariat and service) is 30.5 at Istres and 33 in the reference CES for 1 607 pupils (equivalent to 27 for 1 050 pupils).

Hours open per year total 1 620 for school time in either CES. To this have to be added (for the Istres CES) 1 080 hours for non-school time and 360 hours for the operation of the open-air centre which occupies the school during the holidays making a total of 3 060 hours compared with 1 620 hours for the reference CES. Hence:

- rate of return 1: $\frac{949}{3\,060}$ FF 0.31 per m^2 for Istres

  and $\frac{945}{1\,620}$ = FF 0.58 per m^2 for the reference CES;

- rate of return 2: $\frac{3\,060}{30.5}$ = 100 for Istres

  and $\frac{1\,620}{27}$ = 60 for the reference CES.

Hourly running costs (management plus maintenance) come to $\frac{257\,608}{3\,060}$ = FF 87 per hour at Istres and $\frac{314\,248}{1\,620}$ = FF 193 for the reference CES, general overheads amounting to FF 42 and FF 73, respectively, per hour.

149. When the total costs of the various co-ordinated facilities are added together the results given by this method are sometimes even more eloquent. The open-air centre (children's recreation) operating at Istres has no facilities of its own, whereas in a municipality of the region taken as reference, the corresponding institution needs facilities totalling 2 525 m^2 costing F 1 208 per m^2. Some of the study's findings are summarised in Tables 12 and 13.

Table 12

COMPARISON BETWEEN THE COST PER M^2 FOR REFERENCE ESTABLISHMENTS AND THE COST PER USABLE M^2, DUE TO CO-ORDINATION, FOR CEC ESTABLISHMENTS

Establishment	CEC Establishments			Reference Establishments
	Investment cost in French francs)	Usable area due to co-ordination (in m^2)	Cost per usable m^2 (in French francs)	Cost per m^2 (in French francs)
Library	1 536 000	1 253	1 226	1 834
CES	8 840 494	10 870	813	945
Leisure centre (1st phase)	895 350	1 750	511	1 486
Recurrent education centre	576 690	559	1 031	2 254
1st TOTAL	11 848 534	14 432	821	1 209
Open-air centre	0	2 525	0	1 209
2nd TOTAL	11 848 534	16 957	699	1 209

Table 13

COMPARISON OF RATES OF RETURN BETWEEN CEC ESTABLISHMENTS AND REFERENCE ESTABLISHMENTS

Rate of return: $\frac{\text{investment cost}}{\text{hours open}}$

in French francs

Establishment	CEC Establishments		Reference Establishments	
	Real rate	Virtual rate	Real rate	Virtual rate
Library	0.50	0.47	1.37	-
CES	0.31	0.26	0.58	-
Leisure centre	0.30	0.11	0.59	-
Recurrent education	1.40	0.68	2.00	1.71
Average rate	0.63	0.38	1.38	1.05

Rate of return: $\frac{\text{hours open}}{\text{staff}}$

Establishment	CEC Establishments	Reference Establishments
Library	1 078 986	327 648
CES	111	67
Leisure centre	1 233	553
Open-air centre	1 305	795
Average rate	942	478

Part Five
COMMENTARY

INTERNAL CO-ORDINATION OF FACILITIES AND INTEGRATION IN THE URBAN ENVIRONMENT

150. Study of the Istres CEC shows that the problems of co-ordination of facilities are closely bound up with the problems of relations between the facilities and the urban environment. This is particularly important because it means that the solution to the problems of co-ordination of facilities is not to be found merely through a more or less advantageous rearrangement of the standard facilities that it is wanted to call in question. An analysis of the planning or design methods used at the start shows both their innovative character and the priority given to problems of "internal co-ordination".

151. The interest of the planning method used at Istres is that it attempted to go beyond a conception based on the traditional division of facilities and to find an approach based on an analysis of functions. This path was taken in order to find a way of breaking down the administrative compartmentation governing the division between activities or services which ought to have functional inter-relationships. But at the same time the notion of co-ordination was not made explicit, or rather was defined as a reaction against compartmentation. Implicitly, the notion of co-ordination implied grouping: it was a question of deciding what ought to be grouped with what. It was difficult to discuss co-ordination in terms of distance or dispersal. Implicitly the CEC became a new facility, an original and innovative concentration of non-standard facilities but conceived as a pole with a specific location in space. The CEC had an "inside" and an "outside". The problem was how to open it up to the outside.

152. The planning of the project and the task of conceiving it, as regards both the facilities and the arrangements made for their staffing and management, suffered from an imbalance in which the problems of internal co-ordination overshadowed those of external co-ordination. This is probably explained by the urgency and acuteness of the difficulties particularly with regard to the co-ordination of financing arrangements and programmes, and

the large number of partners involved all tending to impose upon the central level their models, norms and sectoral demands, and by the need to create new structures to sustain the life of the CEC. The imbalance was further increased by the absence of a study of needs and by the low level of participation by the community in working out the project. It meant that the intellectual effort and energy put into the project was applied practically exclusively to solving problems at the level of the spatial and administrative organisation of the CEC itself.

153. Initially, the only identified needs were quantitative, based on a list of facilities to be provided in relation to size of population. These ratios give no clue as to what the potential population (and its various groups and categories) may expect from the facilities or from their activities, the services they offer and their design. Later the growth of the CEC and urban development generated other needs, induced by the co-ordination situation (e.g. a greater need for meeting places) and specific needs connected with the growth and pattern of the local population.

154. As regards the problems of management and co-ordination the emphasis on the pursuit of integration as a reaction to dispersal also contributed to the trend for concentration of the CEC facilities. This new set of facilities is now creating problems regarding the relations between the inside and the outside of the CEC. The question is whether the links between the facilities (internal co-ordination) might possibly contradict, oppose, or be in competition with the community, that is to say the relatively complex reality constituted by the population and the housing in the neighbourhood. The continuous difficulty arises of breaking down the relative isolation of the CEC from the community and creating - through its action - a link between old and new populations.

155. Today, the need to develop the project in the direction of greater integration with its environment is manifest in a number of ways:

- the awareness of needs that it is not possible at the moment to meet properly in the framework of the internal life of the CEC: needs connected with where people live (the building up of the new districts), those connected with employment or unemployment, and those connected with the traditional social life of the Istriens (associations);
- the difficulty of inducing certain categories of the population to take part in the life of the CEC, detectable particularly at the level of the services that used to be located in the old town, such as the health centre and social service, which have been

allocated relatively considerable new resources at the CEC but which are not yet used to the extent that they ought to be;

- the realisation that the centre of gravity of local life has not yet shifted to the CEC (the new town centre has not been built) and that problems of liaison with the old town therefore need solving.

156. The history of the changes made to the programme during its implementation is significant from this standpoint. The CEC was to have had a powerful pole of cultural activity (an 800-seat theatre with annexes). In fact, this part of the programme was split into two, one for the building of a small theatre (300 seats) in the CEC with a few associated rooms and offices and the other for the restoration of the municipal casino (700 seats) intended to become the centre of cultural activity in the old town. This split, seen by some as a rift in the integration of the facilities and a threat to internal co-ordination, raises an interesting problem: the overall action of cultural "animation" carried out in the framework of the CEC will have to change its focal point (the changeover from a single pole to two poles) in order to use the existing resources (the old casino) and to find bases that fit in better with the pattern of local life. The fact that this change in the project may have been the occasion of struggles of influence or that the grounds for it may not all have been avowable, does not alter the significance of the phenomenon. The problem remains of how to co-ordinate action between the two poles that have thus been set up, how to avert the danger of segregation both in activities and in publics and how to transfer the benefits of the close links developed between various establishments within the CEC. It will also be important to see whether the furnishing and equipment of the CEC theatre (robustness, or otherwise, of the facilities, and the level of sophistication of the audio-visual equipment) will affect opportunities for multi-purpose use and appropriation by different groups, regardless of their degree of professionalism in the field of cultural and leisure activities.

157. An analysis of the location of activities suggests there is a trend to combat the danger of concentration. It is perhaps when "going outside" that groups find their identity and specificity. The cultural association uses the public open-air areas in Istres, Miramas and Fos; the social centre uses the residential community facilities in the concerted development zones and even the housing itself; the employment office goes directly into firms; the health centre organises social group activities in residential premises; the library is trying to organise relay points in

the districts; the open-air centre and the sports centre have open-air activities outside the CEC; and the recurrent education centre has activities in the accommodation provided for workers on building sites.

158. It has also been observed that the growth and scale of CEC activities call for increasingly frequent meetings and a more systematic organisation of the dissemination of information. The officials concerned complain about the heavy claims on their time. Above all they say they are increasingly tied down by the "public relations and administrative liaison" functions and increasingly resent the difficulty of keeping in touch with the detailed progress of the various activities.

159. Alongside the desire to allow users to appropriate the various facilities and to create in them the conditions for conceiving and building up new activities, it was felt indispensable to provide the necessary bases for activities, the areas which would make them possible. This was partly behind the idea of multi-purpose facilities. At the same time, however, it must be noted that there was no user participation in the planning process. Concertation was confined to the authorities and technical specialists. It would seem that there is a first contradiction here, the effects of which are being felt in the very operation of the CEC, and its relations with the population, local communities and organisations involved.

160. Lastly, as was pointed out in the analysis of the urban context, it would appear that decisions concerning urban development and the location of roads and interchanges will probably be a decisive factor as regards the integration of the CEC in urban life.

CO-ORDINATION OF FACILITIES AND DIFFERENTIATION PROBLEMS

161. It is clear, in the case of the Istres CEC, that the pursuit of greater co-ordination of facilities and activities at the same time causes problems of differentiating activities, institutions and populations. If co-ordination is a matter of creating a new whole out of a number of separate components, it must do more than just add up the various facilities and institutions and avoid relapsing into the initial make-up in terms of standard facilities - neither, conversely, must it degenerate into the formation of an undifferentiated aggregate. In the interplay between co-ordination and differentiation a current trend is to look for new subsets and new identities. The national employment office, the adult vocational training agency, the guidance and information centre and the

recurrent education centre have preferential links with each other. The leisure centre and the cultural association are in search of their own specificity. The reception and relations functions are increasingly revolving around the social centre and the leisure centre. Internal differentiation is thus beginning to emerge. It is interesting to note the description given by the CEC management regarding this point. It sees three stages of development:

> Originally the CEC was identified with the first establishment to be built - the CES. In the eyes of the Istres and neighbouring population it therefore primarily reflected an image of school.
>
> In a second stage, reacting against this first association of ideas, the policy of the CEC management was to promote an image of unity. The object was to "demystify" the CES and back the CEC, the co-ordinated complex. This second phase coincided with the advent of new establishments: the library, the leisure centre and the open-air centre. There would have been no way of avoiding this stage and it gave an opportunity for working relationships and friendships to develop.
>
> Currently the installation of the "associate" establishments - the social centre, school of music, and cultural association - has brought about a change in management policy at the CEC. The object now is to turn it into a "federation of establishments" each of which has its own autonomy in a co-ordinated complex. "Federal power" is limited. The CEC management feels that this should improve the public's understanding of the services it may expect of the CEC and define more clearly the role of co-ordination. Federation must not be tantamount to merely aggregating the establishments. "We feel that the federative structure of autonomous establishments developed by the Istres CEC is probably the best because it allows the fullest possible operational flexibility, based on the life of each establishment, without pre-determining, once and for all, preferential relationships and permits every possible type of association and development - provided of course each and every establishment is fully committed to co-operation, since otherwise the structure could well, merely as a result of the centrifugal force of each unit, revert to a mere aggregate of establishments. The whole of federative life should strive to avert this threat and to promote forms of co-operation and modes of concerted action".

162. The search for some kind of identity would involve some risk of reversion to a new kind of fragmentation. Many still feel the CES to be

a massive fortress with which communication is difficult. The institutions working in associated spheres (culture and education) also tend to delimit territorial boundaries as far as facilities are concerned. The theory that each and every CEC activity should be a "point of entry" for other activities does not always work out. It is, as a rule, true for cultural and educational activities, and it is also true for social activities which increasingly serve a reception and information function but it is less true for socio-economic activities (the adult vocational training agency and the national employment office) or for the sports activities which seem to form a world apart(1). Care should be exercised, however, in interpreting these findings and allowance made for the changes that time may bring. Above all, it would appear that co-ordination is seen as an advantageous grouping of resources from which each institution derives benefit in the attainment of its own objectives. This association of physical and human resources gives birth to new ideas and increases the efficiency of the services provided.

163. From the standpoint of running and co-ordinating the activities experience goes to show that avoiding social segregation - which is one of the objectives of co-ordination - implies the prior need to recognise the specific requirements of the different groups. It is not just a matter of allowing for the theoretical "universal" needs that the various establishments or functional sets (education, adult training, leisure, social welfare, cultural "animation", etc.) have to meet. The need for the project to be more fully integrated in its environment shows itself in various ways.

164. New and specific needs emerge connected with the characteristics of change in the local situation (the new population structure forming both geographical and sociological levels).

> The presence of a large foreign labour force is creating special problems for the CEC. The foreign population hesitates to come because they see it as an "educational and cultural" centre not conceived "for them" but "for an elite". A further point is that immigrants' children often have difficulty at school and their parents, for whom CES and CEC are the same thing, think it is "too good for them".
>
> The main needs felt at the moment stem from the existence of a high level of unemployment among women coming from other regions. They

1) However, a correlation between the lending of books and the use of the swimming pool as well as a development of joint leisure centre/sports centre activities have been registered.

are mainly questions of living and environmental conditions. The wives of the men from Lorraine are currently trying to organise themselves into various working parties to solve their social, recreational, shopping and transport problems. Here the need to be met is that of providing support and technical assistance for this population in its efforts to organise itself.

Whilst the physically handicapped seem to integrate satisfactorily in the CEC the same cannot be said of the mentally handicapped, for whom the only pole of activity seems to be the workshops.

Old people are also reluctant to come to the CEC and join in the various activities offered them. Pottery is a case in point. Conversely, activities arranged close to where they live have been more popular.

The holiday camp - once it is built - is also likely to attract a more demanding clientele than that currently frequenting the CEC. They will be wanting high-intensity activities ("we come to do everything during our holidays") and will have a different idea of services from that of the regulars using the CEC throughout the year.

165. Another problem, at the internal level, is that of the appropriation by various publics of areas. With the social centre, the open-air centre, for example, is the institution that derives the greater benefit from the grouped resources. This is a strong point in the process of co-ordination of facilities. Here there is a certain independence as between institution and facilities. But how far can this rationale be taken? The fact is that the open-air centre suffers from the lack of specific accommodation that children could make their own. Although they install themselves in the CES during the summer, its rooms are difficult to appropriate. There seems to be a need for reference areas. Communication is conditional on the recognition of differences.

166. Lastly then, is the major influence exercised by the "societies" in Istres old town (friendly societies, war veterans' associations, bull-fighting club, tourist office, majorettes, etc.), which organise many activities enjoying considerable popularity with the local population. This creates major problems of the relationship and balance between the CEC activities and those of these societies. Currently, there is a clearcut tendency for the latter to be integrated in the life of the CEC.

167. The design of the CEC provided for a number of undifferentiated areas (corridors, halls, circulation areas...) in order to encourage encounter

between the different groups and interrelations between activities. In actual fact it would seem that there is no clear understanding of what encourages encounter, what is necessary for it to take place or how to make the bridge between one activity and another. It looks as though these areas do not match what was intended: doors are closed, areas tend to be recuperated (halls are sub-divided, e.g. those in the leisure centre and the CES) and the cafeteria, though full of life, is perhaps a meeting place for staff rather than users.

168. At planning level, the policy of encouraging encounter between groups, integrating the CEC in the community, bringing different social categories into contact and avoiding compartmentation of age groups is clearly expressed. Everyone has to be able to take part in the life of the CEC via the "point of entry" he or she prefers: sports activities, entertainment, drama or social activities. There is no preferential "point of entry". The CEC must not be a centre appealing to an elite. It has to be a place of intermingling and communication. But at the same time, the planning method used did not include a proper study of the population, its needs and its expectations. The community and the environment is regarded as representing a relatively homogenous, undifferentiated entity, free of conflict and contradiction. There is a cross-tabulation of functional criteria - but not between functional criteria and social criteria. This "no" to segregation seems to put up a barrier preventing due regard being paid to diversity and differences(1).

169. Problems of appropriation and co-ordination are evidently related to time as well. It may be a question of the summer-winter rythm, in which the "points of entry" approaches and attitudes of users change with the season (e.g. the summertime shift to the sports and outdoor leisure areas) or differences in the daily rythm of institutions like the recurrent education centre whose daytime activities are growing and which can, therefore, no longer make do with using school facilities in the evenings or when they are not wanted for school activities.

CO-ORDINATION OF FACILITIES AND MANAGEMENT PROBLEMS

170. Though co-ordination of facilities and activities presents a number of management problems they do not appear to be very difficult, at least from the technical standpoint. Co-ordinating and framing the schedules for the various facilities involves no greater problems than those involved in the management of a CES. On the other hand, any mistake has grave consequences. The least miscalculation immediately sets off a series of

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1) The CEC management insists that this first impression does not correspond to the day-to-day practice in which the differentiation of social groups constitutes a major element.

chain reactions that are difficult to bring under control. Questions regarding co-ordination of activities and the related management of the facilities schedules are dealt with in co-ordination meetings (held weekly for the integrated facilities and every six weeks for the whole complex).

171. Neither have any special problems arisen with regard to maintenance. Later on, however, a maintenance department would be justified in view of the number of activities planned. As regards maintenance of equipment, there was at the start a joint fund, but this seemed to lead to rapid wear and tear and because of the general paralysis caused when any particular item broke down the establishments gradually came round to wanting their own funds. At the moment a management system is developing in which both community and own funds coexist.

172. The willingness to share service charges is accompanied by a desire to find a way of identifying their breakdown by buildings. Opinion seems to be inclining towards the introduction of an analytical accounting system enabling each building to be estimated at its real cost. The management of the reception building reflects a similar problem. Whilst the co-ownership system requires the establishment board of the building to draw up internal regulations the ownership rights are exercised by the establishments either under their own name or under that of the local or territorial authority they come under. Although the administrative officer acts as trustee he does not hold this legal status. In spite of its complexity and imperfections, however, and failing any unusual events that might happen (fire) the co-ownership system does not seem to create any lasting difficulties in the daily life of the CEC. The restaurant is run by municipal employees under the control of the administrative officer, but although the latter comes under the Ministry of Education(1) this does not seem to present any problems at the moment.

173. Whilst the technical problems do not seem to be insurmountable, it should be noted that management problems may reflect institutional problems, as in the case of the multi-purpose hall where the differing conceptions of cultural action followed by the cultural centre and the leisure centre confront each other.

CONCLUSIONS

174. The foregoing observations point to a number of lessons and questions regarding methods and procedures for designing and planning co-ordinated facilities.

175. Co-ordinated facilities need to be conceived so as to allow certain basic equilibria to be established:

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1) In practice, he often acts as if he were a civil servant put at the disposal of the local authority.

- firstly between the pursuit of co-ordination and the need for differentiation in activities and areas, and
- secondly between the policy of combatting segregation among social groups and age groups and the need to allow for their specific requirements and the appropriation of certain areas.

Appropriation should not, therefore, be regarded as being in conflict with co-ordination: it is even a necessary condition for co-ordination. It all depends on its nature. Bureaucratic appropriation (in other words, by the structures of the institutions) would be an obstacle to co-ordination.

176. In fact, the achievement of certain objectives (co-ordination and non-segregation) is evidently and paradoxically conditional on account being taken of their opposites. To bring about co-ordination some differentiation between activities has to be retained. Failure to take this tension into account results in the objectives in view being reduced to a situation of concentration and aggregation. To avoid segregation, allowance has to be made for the individual requirements of the different groups; specific appropriation and identification with reference areas has to be possible. Disregarding this principle could lead to a situation in which the strongest dominate and the marginal groups are excluded.

177. The following comments relate to methodologies for planning facilities. Whilst the method used was a major step forward at the time it was used, the important thing now is to stress the need to develop methods based, not on the functions of facilities and their cross-tabulation, but on functions to be provided for, and their cross-tabulation with, the anticipated types of population. These cross-tabulations can then be used to define the activities from which functional sets can be identified; the bases for activities corresponding to these functional sets would be the built or non-built environment, with or without specific buildings. These methods should also allow for the time factor (i.e. rythms of the school year and the seasons) to be taken into account in the planning.

178. However important this methodological research may be, it should not be allowed to breed any illusions. The dynamics of activities, changes in the urban and human environment, the pursuit of the equilibria already referred to (co-ordination/differentiation, non-segregation/specificity) and the relationships between the institutions make it impossible to completely eradicate the element of uncertainty in forecasting. Disciplined and methodical thought to establish the criteria for the rearrangement and growth of the facilities is vital, but even then the unforeseeable and positive nature of the way users make certain areas their own should not be lost from sight.

179. This having been said, one of the basic subjects of research should be the analysis of the needs of the different population groups. It is very clear that "community" and "society" are not homogeneous units. There is a whole internal, changing structure corresponding to specific groups which have their own picture of, and individual relationships with, the facilities. Hypotheses should be formulated regarding these groups at planning stage. Neither should it be forgotten that one rarely starts from zero, i.e. from a situation where there is no existing population whatsoever. Right from the start of any project and throughout its development a mechanism has to be provided allowing a continuing analysis of needs. Reactions to the first facilities provided should be regarded as indicators and the implementation of the project modified in their light.

180. All these questions show the need for design and operation of facilities to be linked. What is needed is to construct operational models enabling various foreseeable situations and probable developments to be simulated. It may not be possible to forecast exactly what form the activities (or lack of activity) of a co-ordinated complex may take, but hypotheses can be formulated about possible tensions or trends. The movement at the Istres CEC towards a federation of establishments may not repeat itself elsewhere in exactly the same way but it may be assumed that there is a dynamics of differentiation of units that could either be establishments, new functional sets or units centred on specific groups. Thus operation will not, in that case, be reduced to a question of pure management but will involve the structuring of the new "systems" making up the co-ordinated complex.

181. The various problems encountered imply that the question of the planning and design of facilities has to be put in terms of strategies or alternatives.

i) <u>Should co-ordination of facilities be conceived in terms of grouping or networks</u>?

182. The observations made at Istres seem to lead to the consideration of a network pattern. This conclusion fits in with the analysis of the various equilibria referred to earlier. Co-ordination of activities together with the possibility to differentiate them, the "no" to segregation together with the necessary appropriation are achievable objectives only if facilities take the form of a network. Between fragmentation and anonymous concentration, this indicates a possible future direction for the CEC. Formulated rather brutally by some, the trend is also felt by the others (with the notably exception of the school establishment) and there are many who are envisaging setting up decentralised relay points

in the near future. The concern to rebalance the strategy of the CEC by developing these decentralised actions concurrently with the policy of channelling participation inwards to the activities of the Centre will probably govern the way in which the project will develop in the future.

ii) Should the first thing to be planned be a facility or a nucleus made up of a number of facilities?

183. It has been seen, in the case of the Istres CEC, how important the decision was to make the CES the first step in building up the complex. Because of the importance of the image that the population associates with any standard facility, it would seem preferable to move in the direction of a minimum nucleus of facilities, with no possible connotation to any standard facility, incorporating the various functions necessary to operate the complex. The planning of other facilities would follow but only gradually and in step with growth in the population or in demand. This would be compatible with the network type of scheme. It is perhaps better to think in terms of "reserves of facilities" rather than to try to set up a compact complex and then decentralise.

184. The planning and design of facilities cannot be reduced to questions of method. In the case of Istres, the diversity of motivations and objectives, the variety and complexity of the levels and centres of decision and the interaction between the planning of facilities and that of the urban environment bring out the weaknesses of a purely sectoral planning. It is, in fact, more the planning procedures that need to be co-ordinated than the facilities themselves.

LOCATION OF COMMUNITY FACILITIES IN A NEW RESIDENTIAL AREA :

The Case of Evry I

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INTRODUCTION

The charts and information given in this paper are taken from the winning entry in the competition for the design and construction of community facilities for the EVRY I district of Evry New Town. The following notes give the background to this material.

Evry New Town lies about 25 km south of Paris and is one of the five New Towns in the Paris region. As for all the New Towns, its development is directed by a technical and administrative body with "établissement public" status and known in this case as EPEVRY. In 1971/72 EPEVRY held a competition for the design and construction of EVRY I, one of the central districts of the New Town. This district will eventually contain 7 000 housing units, the section with which the second phase of the competition(1) was concerned involving 2 500 housing units (about 9 000 inhabitants). This district is in the immediate vicinity of the town centre itself (EVRY II) which has a regional shopping centre and a set of wide-reaching integrated community facilities named Agora d'Evry. These facilities have been in use since 1975.

The "design and construction" principle adopted in the competition is comparable in a way to that of "turnkey projects", the prize-winner being required to build the whole of the district, including housing and facilities of all kinds, in compliance with the conditions laid down in the rules of the competition as regards delivery times and cost. In the French context therefore, one of the original features of the competition was that it called for designer/promoter/contractor teams thus guaranteeing the feasibility of the proposals.

As part of the rules of the competition and under the heading of "mandatory requirements", EPEVRY laid down the content of the whole of the programme: number and type of housing units, distribution of green areas, specification of transport and service networks and the number and nature of the various shopping and other facilities, public and private, to be provided. In particular, the requirements included a programme for the provision of "superstructural community facilities" (schools, as well as social, cultural and recreational facilities), in accordance with the norms in force in France(2) and corresponding to a district containing 2 500 housing units(3). Specifications as to the kind of facilities, their quantity and capacity, and the quantification of the corresponding areas to be built were therefore fixed data which designers could not argue about.

The material reproduced below describes the process by which the facilities were located in the urban fabric, and the outcome of which is summarised in the master plan

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1) The competition was split into two phases, only the second relating to the detailed design of the community facilities to be provided.

2) See "Centre éducatif et culturel d'Istres", page 59 of the present volume, paragraphs 33 to 38.

3) As pointed out in "Context and Trends", page 28 of the present volume, paragraphs 47 and 48, these norms have been revised to suit the case of the New Towns.

(see page 187). This plan is supplemented by a brief general description of the town and the main solutions illustrating it, bearing in mind, of course, the rules of the competition which called, among other things, for high-density housing and peripheral location of green areas. The decisions taken with regard to the location of the facilities are, of course, closely bound up with these urban planning options and reference to them will help in understanding the material presented.

Facilities location was only one of the two fields of study called for in designing the facilities and the very full report from which the charts that follow are taken consists of two complementary parts:

- the first explains the method used in locating the facilities and developing the master plan, and gives the main findings;
- the second contains the specific studies carried out for each individual facility and the design proposals put forward by the prize-winning team.

The few extracts that are given from the first part are confined to an outline of the method used and to two examples of results - by way of illustration. Giving the results in full would not add anything to the understanding of the method. However, even if it has been necessary for reasons of brevity to limit the presentation to the method used for locating the facilities this should not be taken to mean that this method is sufficient in itself. In particular, the location of the facilities is dependent on their design. For example, the breakdown of the imposed facilities programmes into functional elements, which is necessary in order to apply the method for locating them, is the result of design considerations. In spite of this basic complementarity, lack of space will only allow a few brief details to be given about the design of the sets selected to illustrate the location method.

The team that won the EVRY I competition was made up of two sub-groups:

A design sub-group - GARP (Groupement d'Architectes de la Région Parisienne) consisting of three firms of architects: Andrault and Parrat (leader of the "groupement"), Cabinet Sirven, and SCAU (Société Civile d'Architecture et d'Urbanisme, with architects Messrs. Autran, Gruber, Longo, Macary, Molle and Zublena). The latter firm specialises in community facilities problems. The sub-group also included various other specialists such as landscape architects, engineers, artists, and teaching specialists.

A construction sub-group: UCY, a group of contractors led by Mr. Vuibert-Guigue, deputy managing director of OCIL (Office Central Interprofessionnel du Logement) in which ten public and private promoters were represented.

The material from which the following excerpts are taken has not been published. It can be consulted at the GARP offices, 76 rue Vieille du Temple, 75001 PARIS.

INTEGRATION OF FACILITIES

Integration of educational and social facilities was given as one of the major specifications in the competition programme. The principles adopted by the team in order to achieve this integration are defined by the following objectives:

- to offer residents in the district as large a range of facilities as possible;
- to ensure full use of these facilities and to exploit the potential of the available areas;
- to facilitate permeability between the institutions installed in the facilities through the complementarity of the services provided by them;
- to facilitate the continuity of educational action aimed at publics of different ages (continuing education).

These objectives were considered at three levels:

Integration of facilities in the urban fabric. The facilities fit into the network of relationships generated by the urban structure. They form points at which the various elements of that sturcture hinge together (e.g. the pedestrian-only esplanade and the park) or lie at the points where the flows of traffic generated by the urban planning options come together. In addition their position in the constructional pattern of the buildings ensures that they are very close to the housing.

Integration of facilities in a structured network. The different parts of the programme were broken down or put together into functional sub-sets between which spatial relationships were defined. The facilities in this system are interdependent.

Integration of certain facilities grouping together a number of functional sub-sets in the same structure and place. The proximity and physical continuity this implies fall in with the narrow definition that is usually employed for integrated facilities (e.g. socio-educational complex; early childhood social/health centre).

The consequences of this approach are these:

The facilities proposed can be thrown open to general use(1). The decisions on this score cannot be taken at the level of designers' proposals but it seemed essential, in the spirit of the competition, to ensure that this could be possible:

- through the way in which the premises and their internal structures are designed to be accessible to, and to accommodate, different publics whilst allowing certain parts to be reserved for specific uses;
- through intersection between public spaces and those specific to the facilities, the two even becoming one and the same in the case of outdoor spaces.

The integrated facilities include areas provided for under various standard programmes.

These areas have been retained but redistributed within prescribed sub-headings (e.g. CES(2) general education, social centre reception and administration). Although arranged to suit a functional distribution, the areas from each programme can be

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1) In other words they can be opened to various types of public and not restricted to their traditional users (note by editor).

2) Collège d'enseignement secondaire.

identified and isolated, so that they can be assigned in terms of ownership to a specific institution(1).

This seemed to be the best way of ensuring spatial integration and at the same time freedom of choice as regards type of management, since the form of integration proposed admits of three different possibilities:

- separate management (within the whole) of different premises by different institutions;
- co-ordinated management in which the various institutions exchange services or manage certain particular premises on a joint basis (e.g. the public performance hall);
- integrated management in which all the integrated facilities come under one and the same management unit.

METHOD

General

The method used for deciding where to locate the facilities and for developing the master plan is an application of the combinatorial process to urban problems(2). The principle consists in comparing all the parts of a programme two by two. Like a psychological test or a sociological survey, the study splits into three main phases.

a) Elaboration

The following have to be devised in order to test the relationships between a number of facilities:

- a nomenclature;
- a cross-tabulation matrix;
- one or more cross-tabulation scales.

b) Application

Using the instruments thus devised, a working party (or panel) specially set up for the purpose compares each of the items in the nomenclature with all the others. This comparison is carried out with the aid of the cross-tabulation scale or scales. The results are set out in a matrix.

c) Utilisation of Findings

The results mainly take the form of a codified matrix. The information can be analysed in various ways but in the present case analysis was confined to a diagrammatic presentation of direct use to the architects.

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1) The only exception is the mering of areas from the youth centre, social centre, and community residential premises programmes to form the encounter/public performance subset including a 400-seat hall for which there was no provision in any of the programmes.

2) This method, proposed by SCOOPER, was tried out when VAUDREUIL New Town was being designed. The contraints of the competition forced the team to use a simplified version. For more detail see Gérard Heliot and Aimé Hublin "Recherche d'une méthode de localisation d'équipements dans un germe de villes", Architecture d'aujourd'hui - N° 146, October/November 1969.

Nomenclature

The first task was to draw up a list of the elements. Most of them were laid down in the EPEVRY programme but, firstly, they could not be retained as they were(1) and, secondly, other elements were added(2).

a) Facilities

Nursery schools (écoles maternelles): the three ordinary nursery schools (EM1, EM2 and EM3) were treated separately from the school integrated in the early childhood social/health centre.

Primary schools (écoles primaires): the three primary schools in the programme (EP1, EP2 and EP3) were treated separately from the joint services as a whole, which were split into two parts: the recreation centre (L) areas and the catering and joint services areas (R).

College of secondary education (collège d'enseignement secondaire - CES): the areas used for supervised learning (CESe) were treated separately from those used for non-supervised learning (CESne).

Socio-educational complex (complexe socio-éducatif - CSE): this programme was split into six units corresponding to the main activities to be carried on in the premises.

Sports facilities (équipements sportifs): here a distinction was drawn, firstly, between the sports facilities connected with parks A1 and B1 and secondly between indoor and outdoor facilities.

Accommodation facilities (équipements d'hébergement): further to the hostel/hotel for immigrant workers, the young workers' hostel and the old people's home, an hotel was added (the idea is that this should be a people's hotel for use by young French or foreign workers on their own or with husband or wife).

Residential community premises (locaux collectifs résidentiels - LCR(3)): here distinctions were made, firstly, between the LCRs connected with housing and those connected with the facilities(4) and secondly, between the general-use LCRs and those designed and equipped for specific activities.

Other facilities: the programme called for a small local shopping centre, cafés, a group surgery, a police station and a place of worship. To this was added an administrative facility, not completely defined as yet, but which could well form a branch office for the administrative facilities centred at AGORA.

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1) In order to meet the requirement to design integrated facilities, the large ones were broken down into parts, constituting area units relating to a major function.

2) In the event that these additional elements could not be built, the results would not be impaired.

3) The LCRs are areas which have to be provided by promoters of social housing (0,75m2 per housing unit) and which are put at the disposal of the inhabitants for common use. At Evry, instead of being dispersed in all buildings, as is normally the case, they have been grouped and located in certain blocks of flats or facilities.

4) The principle adopted was to use part of the available areas to supplement the programmes for certain facilities.

b) Ancillaries and Miscellaneous Spaces

Some supplementary elements were added which are not community facilities but which had to be taken into account in devising the master plan:

- the walk/drive plaza;
- public transport stopping places;
- short-stay carparks;
- urban mini-gardens.

c) Environmental Elements

Apart from the above pinpoint elements, it was also necessary to introduce the diffuse elements forming the environment around them. They were listed as follows:

- parks;
- ordinary housing;
- one-room flats;
- areas held in reserve;
- offices;
- open areas for pedestrians only, sub-divided according to whether their main function is directional, active or contemplative.

d) Off-Programme Elements

Lastly certain elements around the periphery of the district were introduced because their presence could affect the location of certain facilities:

- AGORA
- Pole II
- Parc des Loges
- University

Altogether the nomenclature totalled about 50 elements (see key, pages 152-153 for the 35 elements used in the charts).

Cross-Tabulation Scales

Two scales were used at one and the same time for systematic comparison of all the elements in the nomenclature. These scales were expressed in a code of symbols which was used to fill in the matrix.

Working Party (or Panel)

The matrix was filled in during a seminar by a working party specially set up for the purpose. This panel was made up as follows:

- three representatives of the promoters;
- two architects representing GARP;
- five specialists as follows: two sociologists, one economist, one landscape architect and one educationist.

1. NOMENCLATURE

Nursery Schools

Nursery school No. 1 — EM_1

Nursery school No. 2 — EM_2

Nursery school No. 3 — EM_3

"Integrated" nursery school with crèche and infant-care centre — EM (hg, pi)

Primary Schools

Reception centre — L

Catering/ common services — R

Primary school No. 1 — EP_1

Primary school No. 2 — EP_2

Primary school No. 3 — EP_3

College of Secondary Education (CES)

Supervised learning — CES e

Non-supervised learning — CES ne

Socio-Educational Complex (CSE)

General recreation — CSE Lb

Specialized recreation — CSE Ls

Consultation — CSE C

Catering — CSE R

Encounter/ public performance — CSE RS

Administration — CSE A

Sports Facilities

A1 Indoor — A_{1c}

A1 Outdoor — A_{1pa}

B1 Indoor — B_{1c}

B1 Outdoor — B_{1pa}

Accommodation Facilities

Hotel

Young workers' hostel

Hostel/ hotel for foreign workers

Old people's home

Ancillary Facilities

Public transport stopping place

Short-stay carpark

Urban mini-garden

Walk/ drive plaza

Other Elements

Shops

Café

Group surgery

Administrative facility

Place of worship

Police station

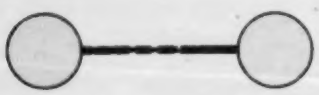
2. TYPES OF LINKS

Integration

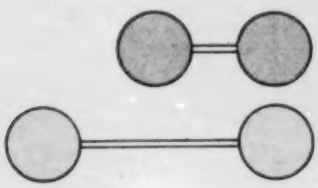
Continuity

Functional link
(less than 50 m)

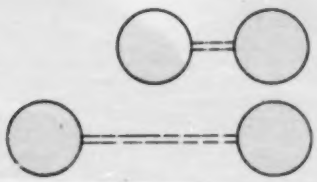
Functional link
(less than 200 m)



Perceptive link
(same urban space)



Perceptive link
(reciprocally visible)



Functional Scale

dispersion or repulsion

indifference

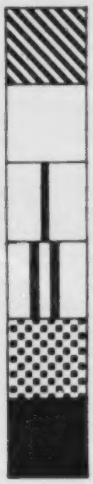
proximity with no major obstacle

proximity with imposed route

adjacency

integration

Perceptive Scale



dispersion or repulsion

indifference

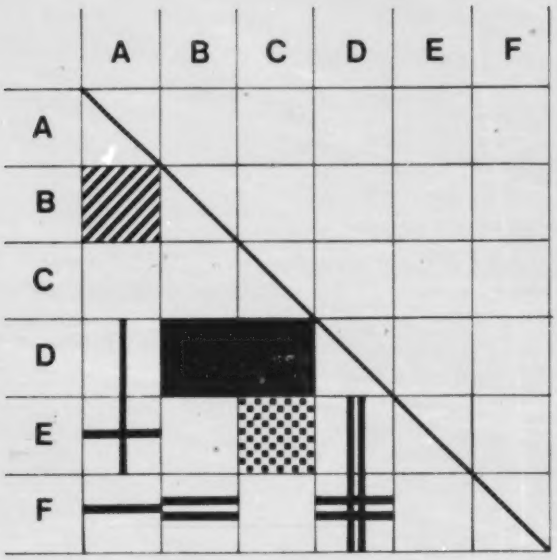
sharing same urban space

reciprocally visible

adjacency

integration

Hypothetical Illustration of a Codified Matrix



A and B are incompatible
A shares the same urban space as D and E
D and E can see each other
D and F can see each other
D and B are integrated
D and C are integrated
C and E are adjacent to each other
A is less than 200 m away from E and F with no major obstacle between them
F is less than 50 m away from B and D and linked to them by an imposed route

All the members of the panel were, in one way or another, specialists in community facilities problems and were all well informed of progress on the studies being made for the competition.

Analysis

A rapid (and purely graphic) analysis was made of the codified matrix. The result of this analysis is presented in the following pages. All the charts produced were passed on to the team of architects (also represented on the working party that filled in the matrix) and with their help, the architects were able to finalise the master plan previously sketched out.

RESULTS

The results are presented in the form of annotated charts:

Element charts(1)
Cluster charts(1)
Sub-set charts
General chart

Whenever necessary, the notes give the reasons why the working party opted for this or that kind of link between two elements.

Interpretation of Charts

Each separate chart represents the links between the element concerned and all the others in the nomenclature. On the lefthand side of the sheet are shown the element's links with the other environmental elements, and on the righthand side its links with the other facilities. Each individual chart is accompanied by brief notes indicating whether the desired links were, or were not, respected when the final master play was established.

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1) Not all the charts have been reproduced. Those given relate solely to the two sets of facilities that have been selected to illustrate the method: the early childhood social/health centre and the socio-educational complex (college of secondary education + youth centre + social centre) together with the sports facilities connected with it - editor's note.

Early Childhood Social/Health Centre

This, in fact, is the "integrated" nursery school consisting of a 7-class nursery school (280 pupils), crèche and infant-care centre. There being only one such programme for the district it had to have a central location. Like all the nursery schools, the "integrated" nursery school has to be close to housing (the distance suggested is less than 200 metres). This condition does not apply to the one-room flats, occupied, with some exceptions, by single people with no children. A continuity link has been shown with the active spaces because it is important for this early childhood social/health centre to be located at one of the busiest points in the area used by pedestrians in order to make it easier for users to visit it.

a) "Integrated" Nursery School

Associated facilities

By definition, the "integrated" nursery school includes a crèche and an infant-care centre. Later on we shall see the links that are made necessary by the presence of these two facilities.

Associated with each nursery school is an urban mini-garden. This green area could be given very careful treatment and could be opened to the public outside school hours. In that case it would act as a small square and playground for children aged between 2 and 6 in an urban space which is otherwise completely devoid of plant life.

Each nursery school is less than 50 metres away from a short-stay carpark. There seemed to be a need for this because some parents will be dropping off or picking up their children on their way somewhere else by car (going to work, for instance).

We have seen that each nursery school is associated with a primary school (less than 200 metres away). Since there are four nursery schools and only 3 primary schools, one of the latter (N° 1) is associated with 2 nursery schools - nursery school N° 1 and the "integrated" nursery school. This is an arbitrary choice, of course, because any of the primary schools would do.

We have seen that each separate nursery school was less than 200 metres away from the "integrated" nursery school so as to make it easier for the users of the former to draw upon the services provided by the latter.

The "integrated" nursery school is less than 50 metres away from the local shopping centre (the two are reciprocally visible). The reasons for this type of link are the central nature of the facility and the fact that it houses a crèche which needs to be in the immediate vicinity of the places that mothers of very young children have most occasion to visit.

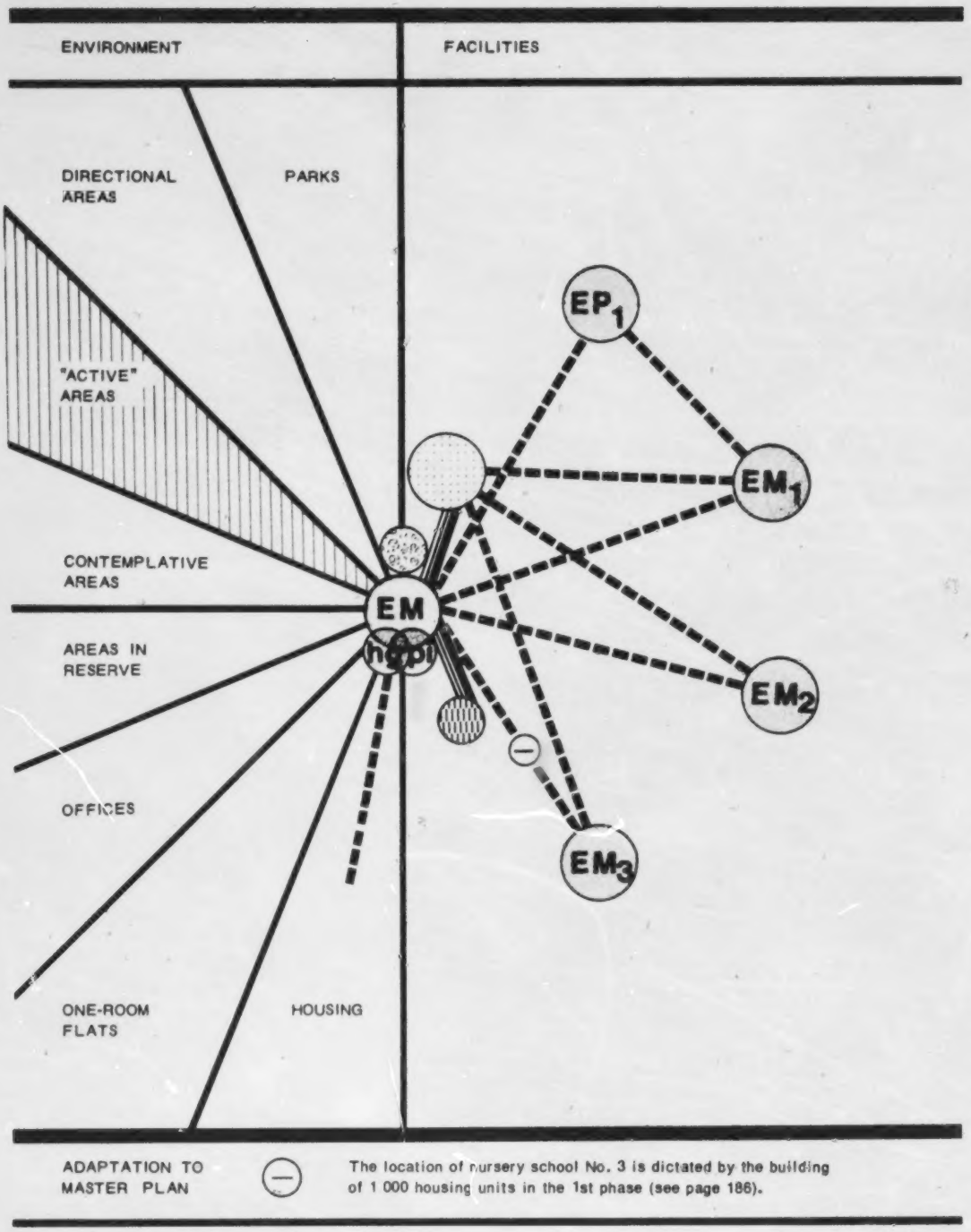
Incompatible facilities

It was thought best to locate the nursery schools well away from the college of secondary education the public of which is noisy and could possibly create problems for young children coming out of school. Lastly, the "strong repulsion" ranking is used to indicate the need to keep the nursery school entrances well away from the "walk/drive" plaza because of the possibility of accident.

Links with off-programme elements

Nil.

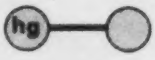
"INTEGRATED" NURSERY SCHOOL



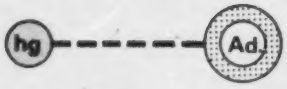
The location of nursery school No. 3 is dictated by the building of 1 000 housing units in the 1st phase (see page 186).

b) Crèche

Apart from those stemming from its incorporation in the early childhood social/ health centre, the crèche calls for the following links:

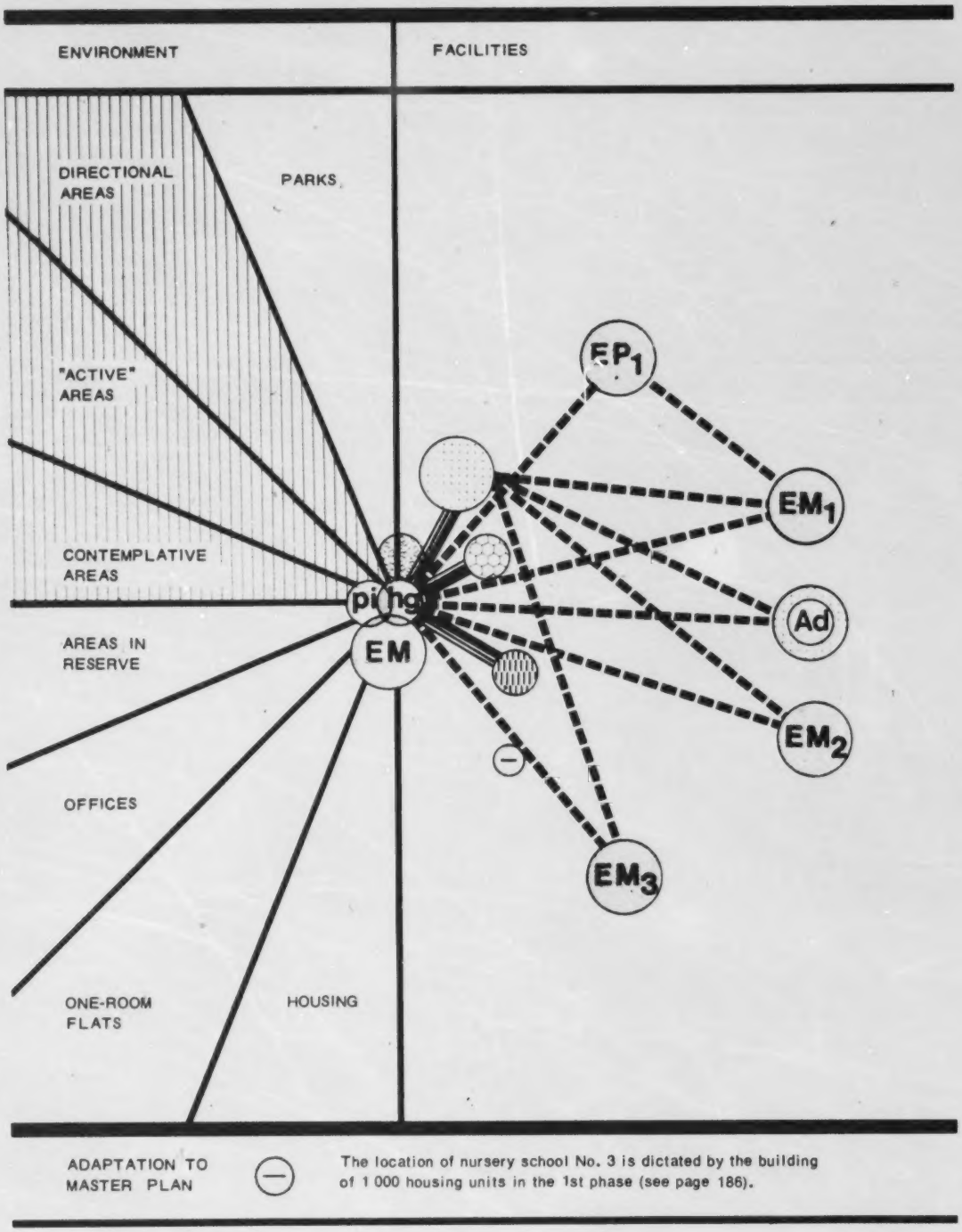


The crèche's main function is to allow mothers to leave their very young children for the time they need to go shopping, etc. The crèche therefore needs to be in the immediate vicinity of a public transport stopping place (and directly visible from it) so that mothers using this mode of transport should not have a long way to go in order to deposit their children. In addition, the direct visual link has an informative function for mothers who may sometimes be unaware of the services offered by this type of social facility.



As we have seen, the crèche is close to the local shopping centre but it also needs to be close to the administrative facilities - which mothers may also have to visit for various reasons.

CRECHE

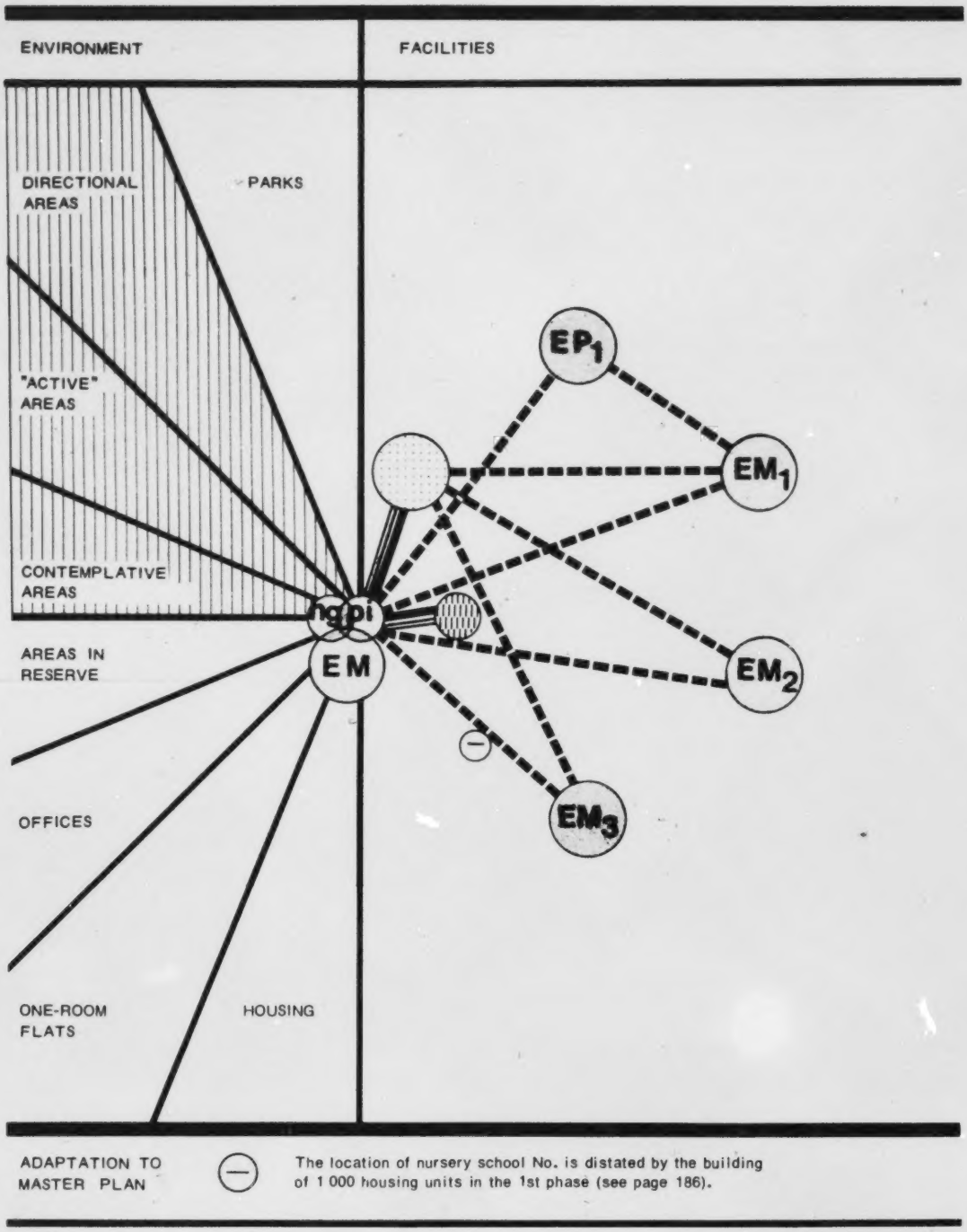


The location of nursery school No. 3 is dictated by the building of 1 000 housing units in the 1st phase (see page 186).

c) Infant-Care Centre

Being integrated in the early childhood social/health centre, the infant-care centre is covered by the links already considered in the case of the nursery school and crèche. It does not generate any need for other links.

INFANT-CARE CENTRE



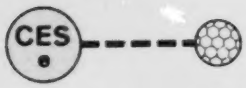
Socio-Educational Complex (CES + CSE)

a) CES - Supervised Learning

This relates to the areas intended for teaching in its various forms. The location of this element is defined by the need for proximity (less than 200 metres) to housing and the main pedestrian area. In addition, these teaching areas need to have direct access to park B1.

Associated facilities(1)

This proximity link (less than 200 metres) reflects the concern to facilitate adult education among young workers for whom evening classes could be organised in the CES premises.



CES pupils will presumably use public transport.

A nearby carpark may be useful for parents bringing their children by car, or for teachers or visitors.

Incompatible facilities

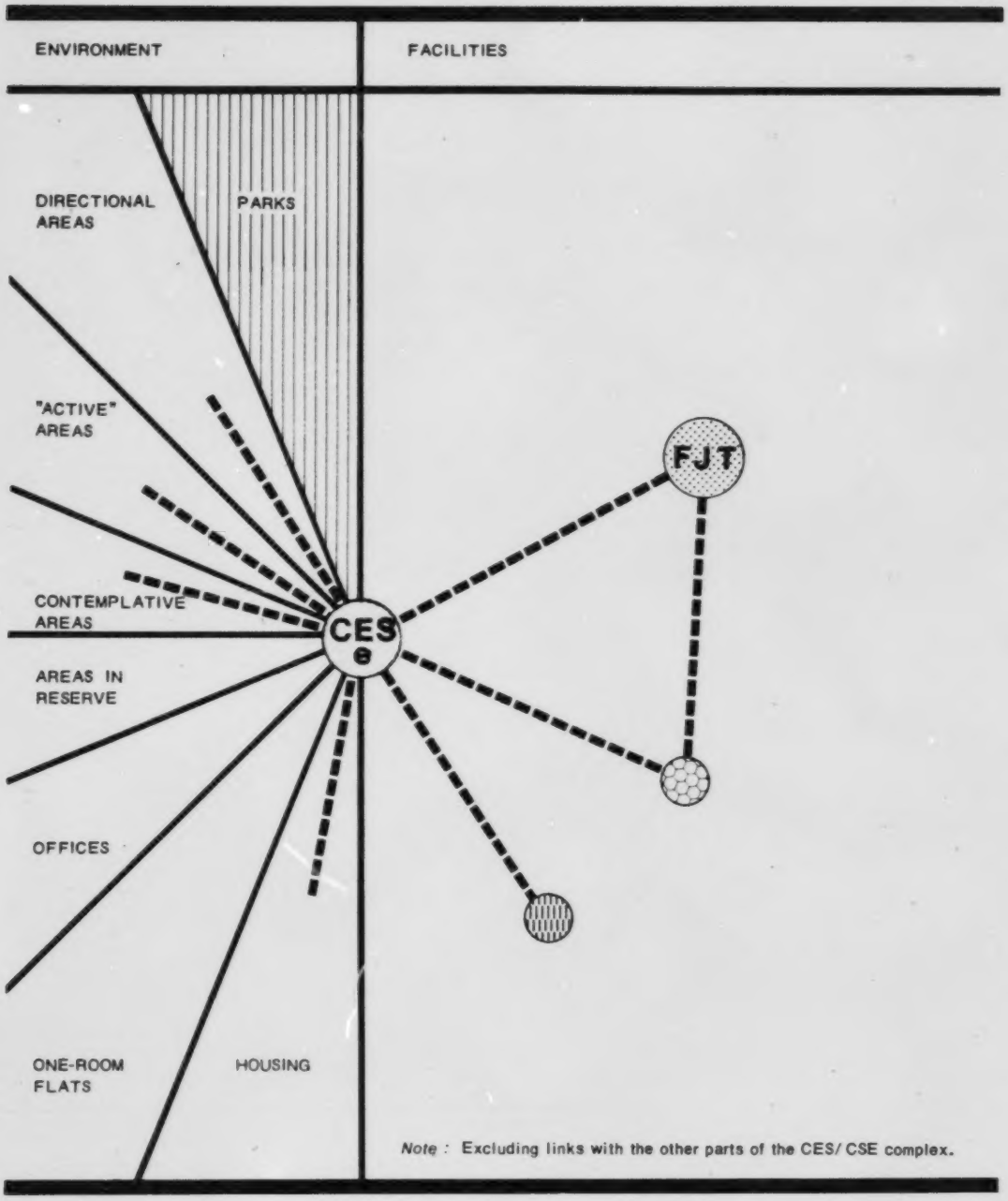
In general, it was considered preferable to have this complex away from all other educational facilities in order to avoid constituting a school "cluster" and also to avoid certain disadvantages of mixing children of greatly differing ages.

Links with off-programme elements

Nil.

1) Only links with elements not included in the CES/CSE programme are dealt with here. The internal structure of this programme will be described at a later point (see "Additional information regarding the design of the socio-educational complex ", page 189).

CES - SUPERVISED LEARNING



Note : Excluding links with the other parts of the CES/CSE complex.

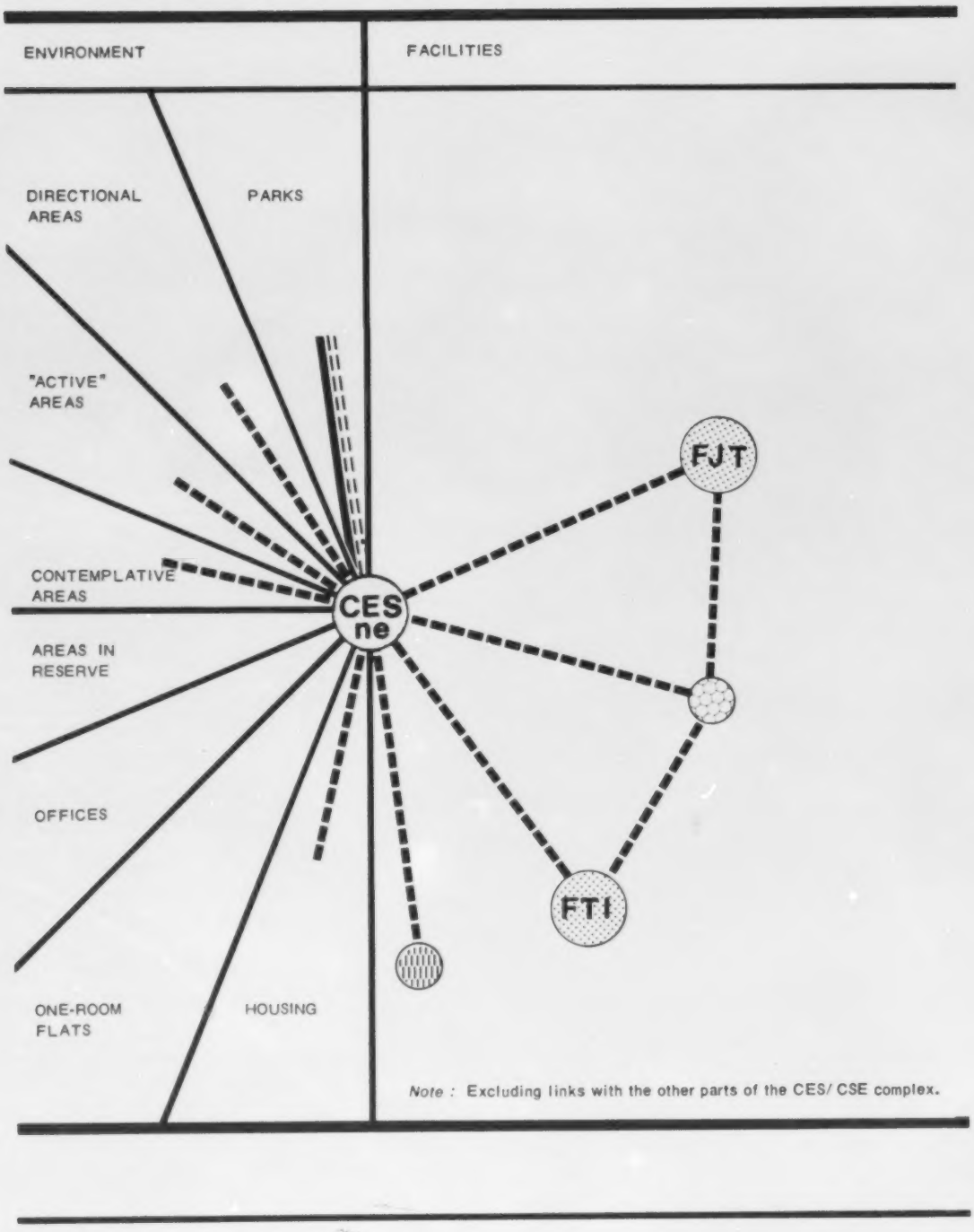
b) CES - Non-Supervised Learning

These are the spaces intended to provide school children with facilities for learning on their own. Regarding their location see CES - supervised learning.

Associated facilities(1)	See CES - supervised learning.
	In addition, proximity with the immigrant workers hostel/hotel was also felt desirable because the hostel might not have all the space it needs for literacy courses.
Incompatible facilities	See CES - supervised learning
Links with off-programme elements	Nil.

1) Only links with elements not included in the CES/CSE programme are dealt with here. The internal structure of this programme will be described at a later point.

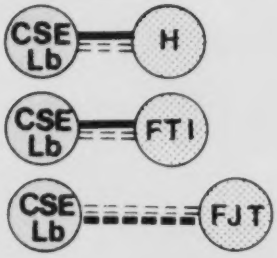
CES - NON-SUPERVISED LEARNING



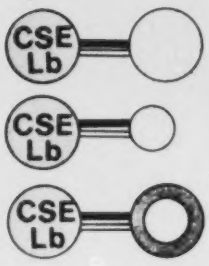
c) Socio-Educational Complex - General Recreation

This elements is planned to accommodate organised or free-form recreational activities, not determined by the form and nature of the accommodation. In terms of location it is therefore essential that these premises, used by a very broad-ranging public on a voluntary basis, communicate directly with the "active" pedestrian area. Like the other parts of the socio-educational complex, it needs to be relatively close to the housing and one-room flats. Proximity to offices is also indicated, pointing to the possibility of using the facility from work.

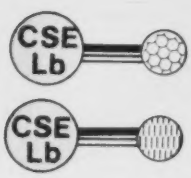
Associated facilities(1)



A proximity link has been shown between the CSE general recreation premises and the accommodation facilities for two reasons: firstly, there will be single men and women in these facilities who might well form a large proportion of the public using the premises and, secondly, the socio-educational complex will be one of the centres of life in the district and the benefit of this, should go, by priority, to the users of the facilities.



The plan for form the liveliest centre in the district around the CSE is also indicated by internal functional and perceptive links (direct visibility at under 50 metres) between its component parts and the other main sources of animation: the district shopping centre, a café, and the walk/drive plaza.



The facility will need to be served by a public transport stopping place and a short-stay carpark.

Incompatible facilities

This element, used by many young people (from the CES, the youth centres, the young workers' hostel, etc.) should not be continuously under the eye of the guardians of public order, which would either reduce its liveliness (and the New Town will greatly need animating), or invite the risk of frequent trouble.

Links with off-programme elements

The centre of life in the district should be as far away as possible from AGORA since it would suffer if it were close to it. An off-centre location towards Pole II would have the further advantage of facilitating its use by the first people to live in Pole II pending the building of facilities there.

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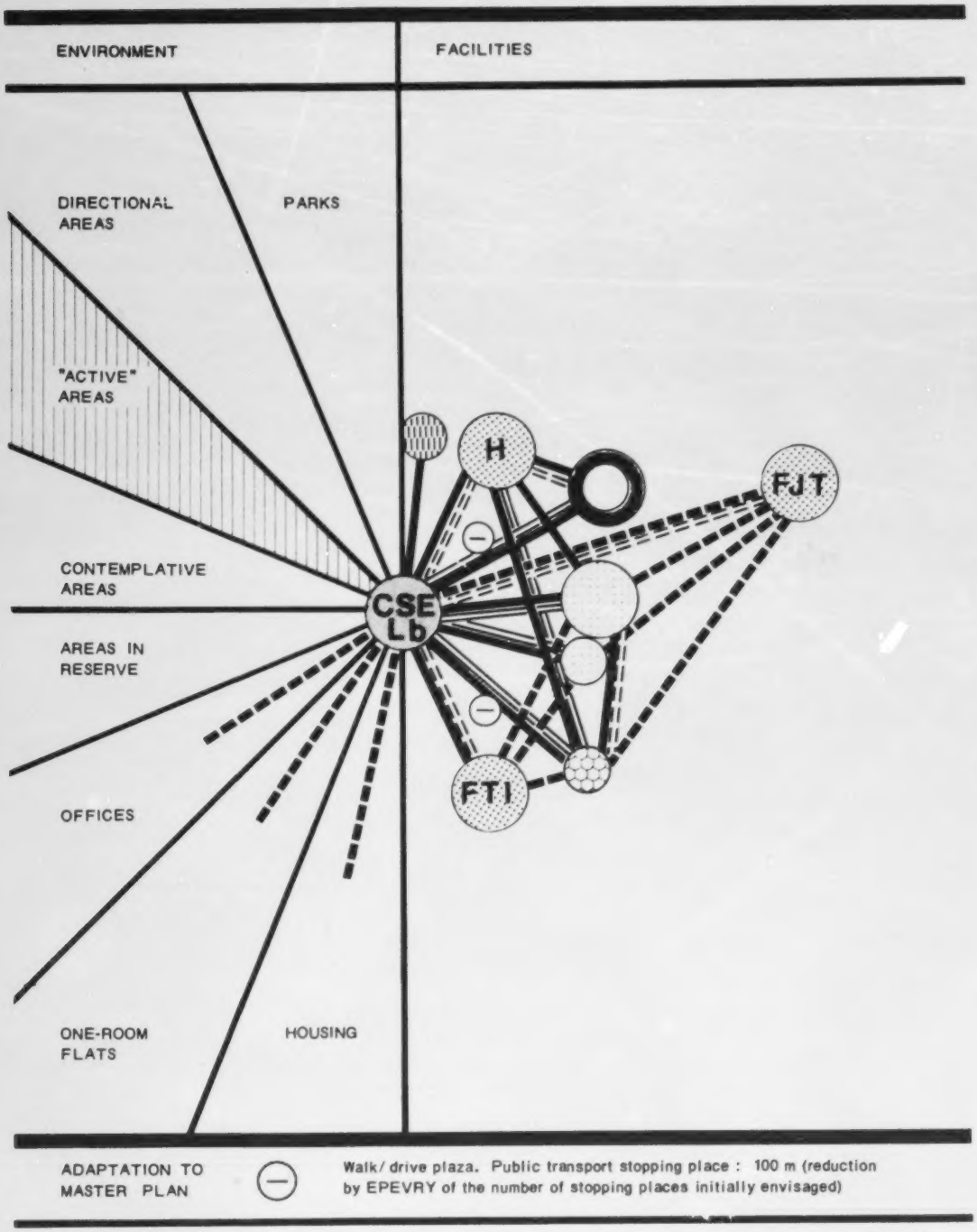
1) Only links with the accommodation facilities are dealt with here. The intention is expressed in the form of a perceptive link showing that the facility is part of the same urban space.

CSE - GENERAL RECREATION



d) Socio-Educational Complex - Specialised Recreation

The activities which this element accommodates come under the headings of both recreation and education. They require large-scale and costly equipment, not suitable for multi-purpose use. Regarding the location of this element see CSE - general recreation.

Associated facilities(1) — See CSE - general recreation.

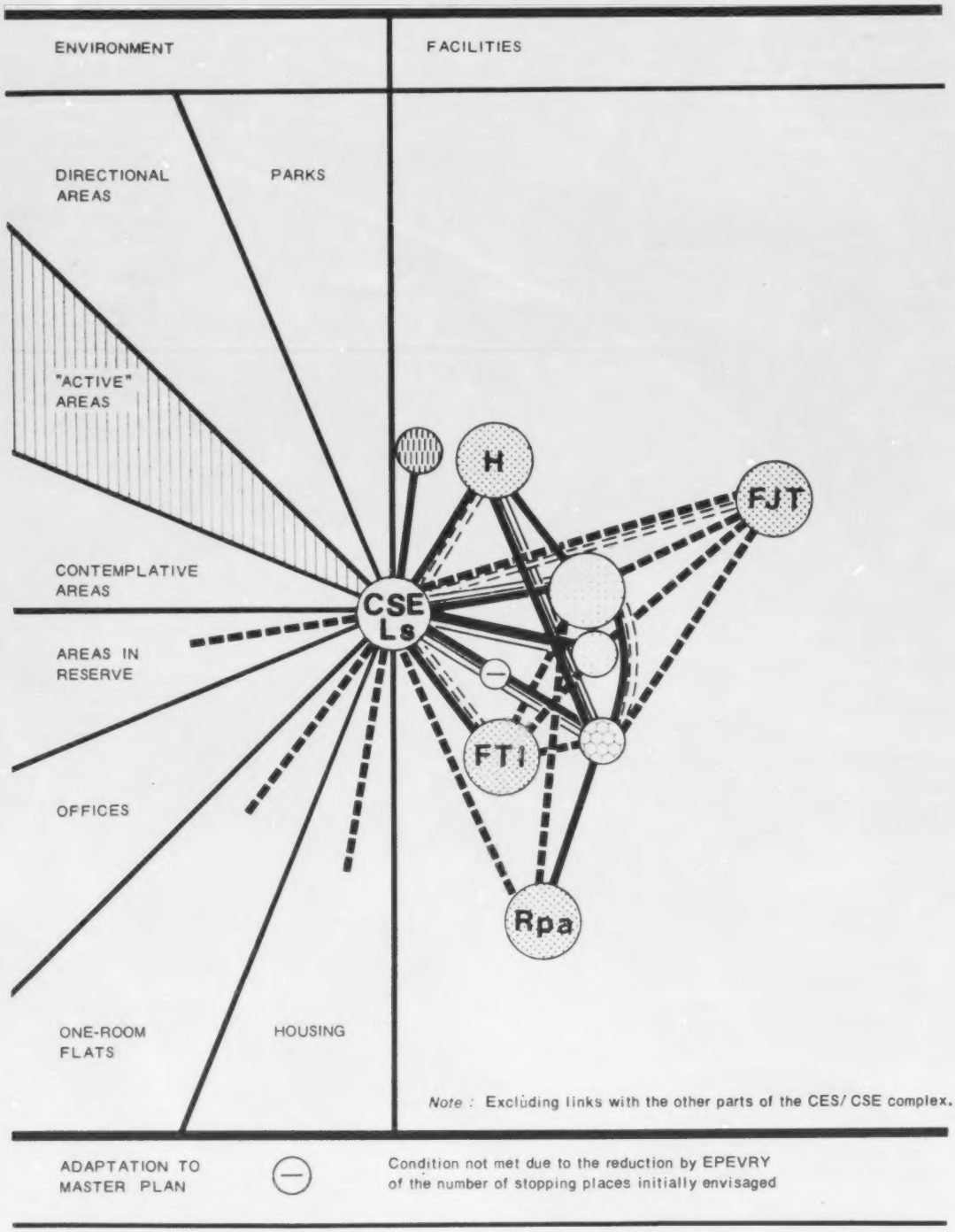
In addition, proximity to the old people's home was considered desirable because of the various activities that these premises and facilities could offer for old people (as is known, the leisure and recreation problems of old people are beginning to attract attention.

Incompatible facilities — Nil.

Links with off-programme elements — Nil.

1) Only links with elements outside the CES/CSE programme are dealt with here. The internal structure of this programme will be described at a later point.

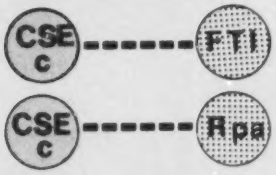
CSE - SPECIALISED RECREATION



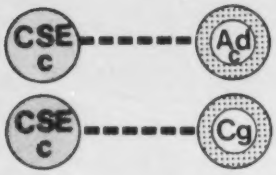
e) Socio-Educational Complex - Consultation

These premises house the social services offered by the centre to local residents and the medical services intended for CES pupils. The premises need to communicate directly with the pedestrian area.

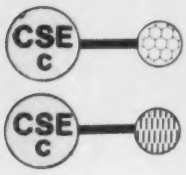
Associated facilities(1)



Two types of public are more likely to make use of this consultation centre: foreigners and old people. This explains the suggested proximity link (less than 200 metres) with the hostel/hotel for immigrant workers and the old people's home.



The proximity link between the consultation centre on the one hand and the administrative facility(2) and group surgery, on the other, reflect the functional complementarity between these various facilities.



The consultation centre needs to be served by a public transport stopping place and a short-stay carpark.

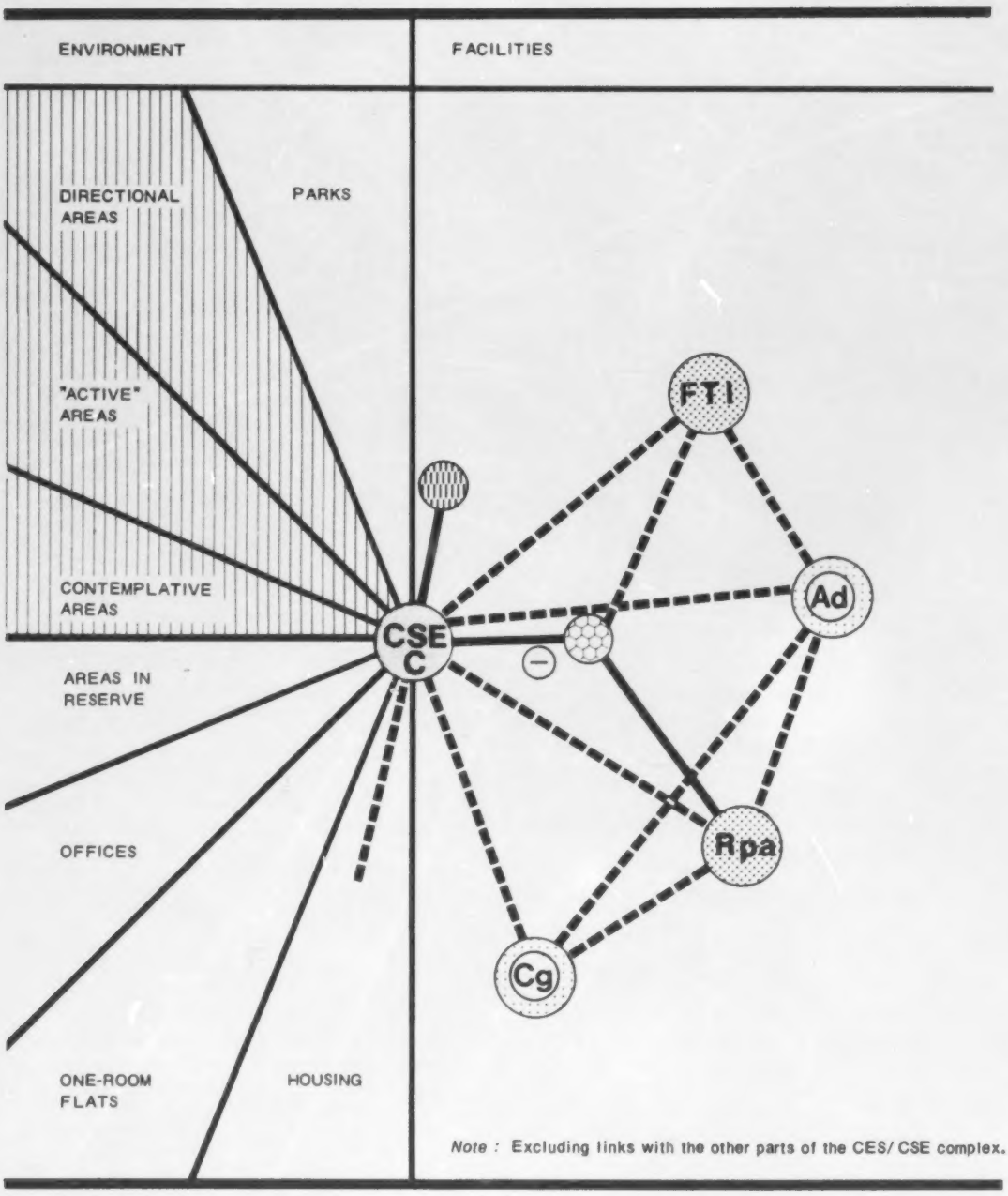
Incompatible facilities — Nil.

Links with off-programme elements — Pole II - see CSE - general recreaction.

1) Only links with the elements outside the CES/CSE programme are dealt with here. The internal structure of this programme will be described at a later point.

2) The administrative facility could possibly include a social security annex.

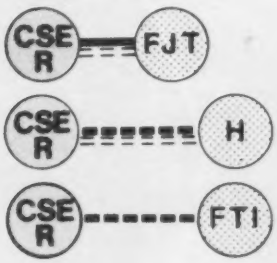
CSE - CONSULTATION



f) Socio-Educational Complex - Catering

The catering premises give on to the "active" pedestrian area so that people taking meals are able to look out onto the scene whilst eating. In addition a proximity link with the offices and one-room flats has been shown so as to facilitate use of the restaurant if it were to be opened as a cafeteria for the residents.

Associated facilities(1)



These proximity links (together, in some cases, with visual links to underline that the facilities share the same urban space) are intended to facilitate use of the restaurant as a cafeteria by certain types of public housed in the accommodation facilities (young workers' hostel, hotel, hostel/hotel for foreign workers).

Having a café in the immediate vicinity is justified by the complementarity of the two facilities.

Incompatible facilities — Nil.

Links with off-programme elements — Nil.

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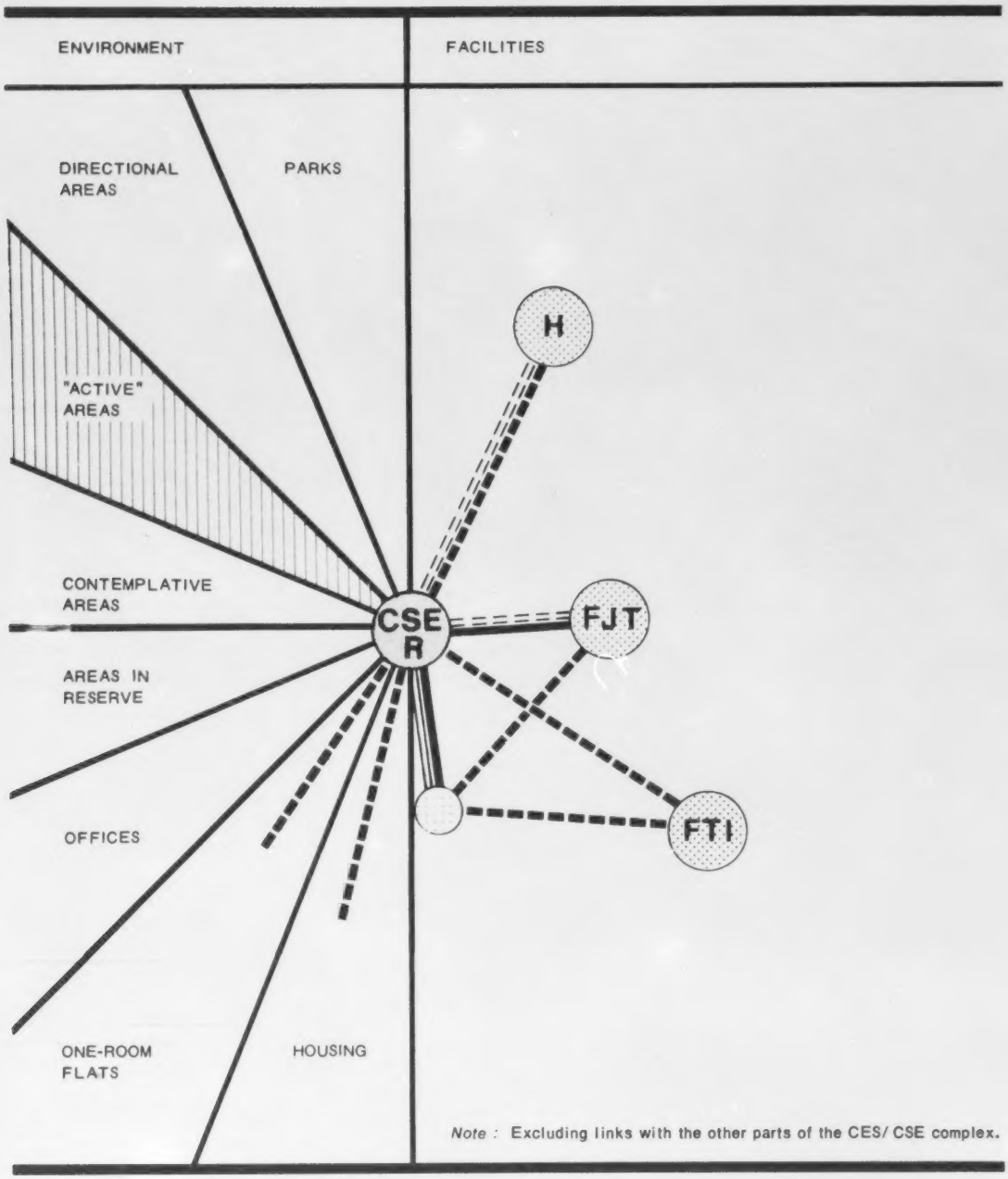
1) Only links with the elements outside the CES/CSE programme are dealt with here. The internal structure of this programme will be described at a later point.

CSE - CATERING



Note : Excluding links with the other parts of the CES/ CSE complex.

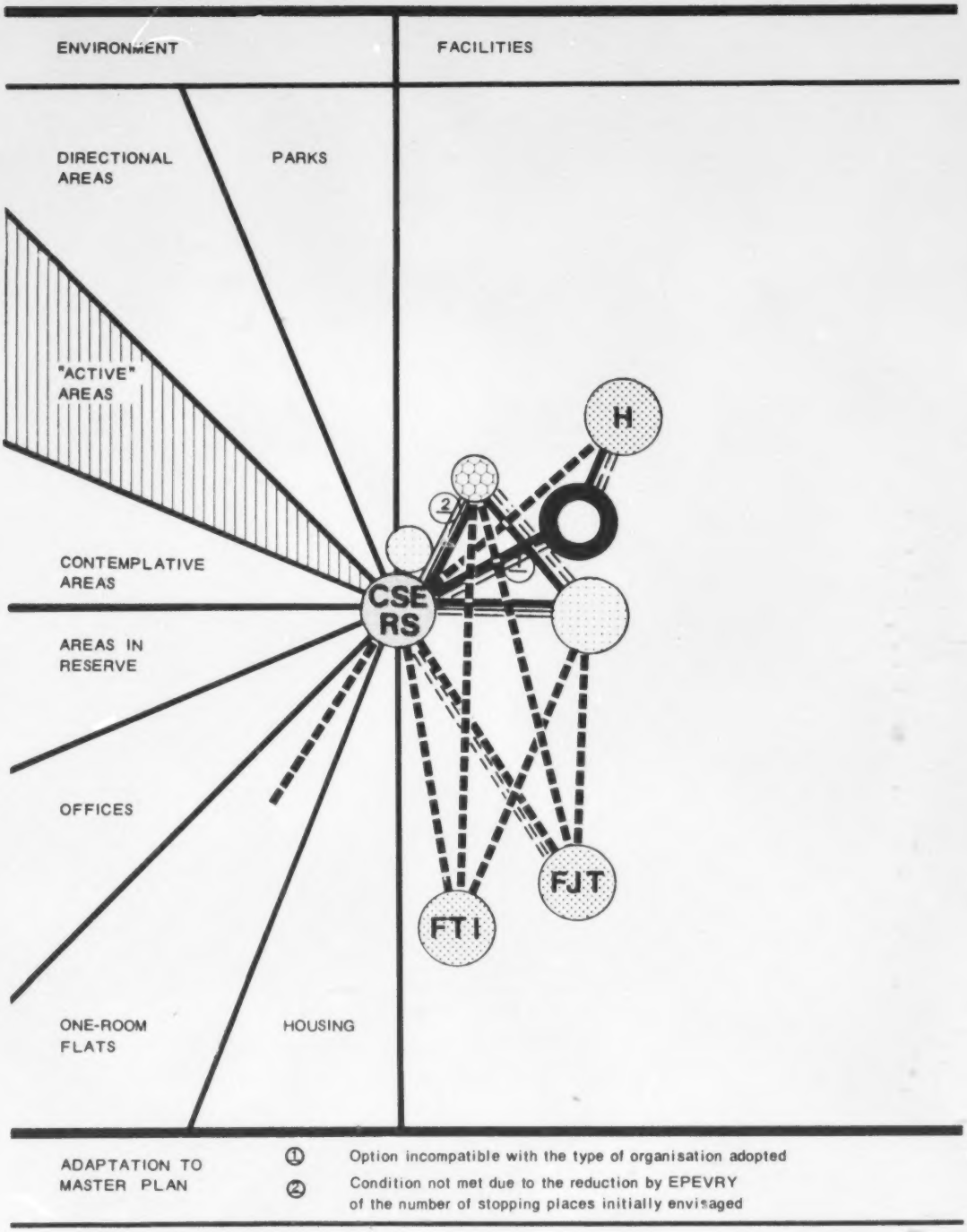
g) Socio-Educational Complex - Encounter/Public Performance

This element is intended for manifestations linked with young people's life in and out of school and possibly as a place where the users of the complex could hold information or other meetings. Regarding its location see CSE - general recreation.

h) Socio-Educational Complex - Administration

In order to facilitate the co-ordinated management of the CSE/CES, it would be useful to have all the administrative offices sharing the same space. These premises, which have an internal function, do not need any preferential links with the other facilities in the programme.

CSE - ENCOUNTER/ PUBLIC PERFORMANCE



Sports Facilities

a) Indoor Facilities (B1c)

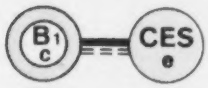
The indoor sports facilities connected with the CES consist of:
- a large indoor sports hall;
- a gymnasium;
- a training room;
- washing and sanitary facilities, changing rooms and storerooms for the above facilities.

The facilities are located on the border of park B1 and of the network of urban spaces in order that they may be used outside school hours by residents in the district. They are therefore located in the vicinity (less than 200 metres) of the housing and one-room flats and of the offices as well so as to link the exercise of a sports activity with work. These urban facilities give on to the pedestrian-only street.

Associated facilities

The purpose of having the indoor sports facilities adjacent to the CSE general recreation and encounter/public performance premises was to make it possible for the sports facilities to be used for non-sports functions (big meetings and exceptional performances).

The indoor sports facilities are in the immediate vicinity (less than 50 metres) of the outdoor facilities in park B1. This is necessary for school purposes: school children can easily transfer from one to the other during the same period.



The other links between the indoor sports facilities and the other elements of the CES/CSE complex are shown here merely for the record because, since the whole of the CES/CSE is integrated, all the immediate proximity links are automatically fulfilled.

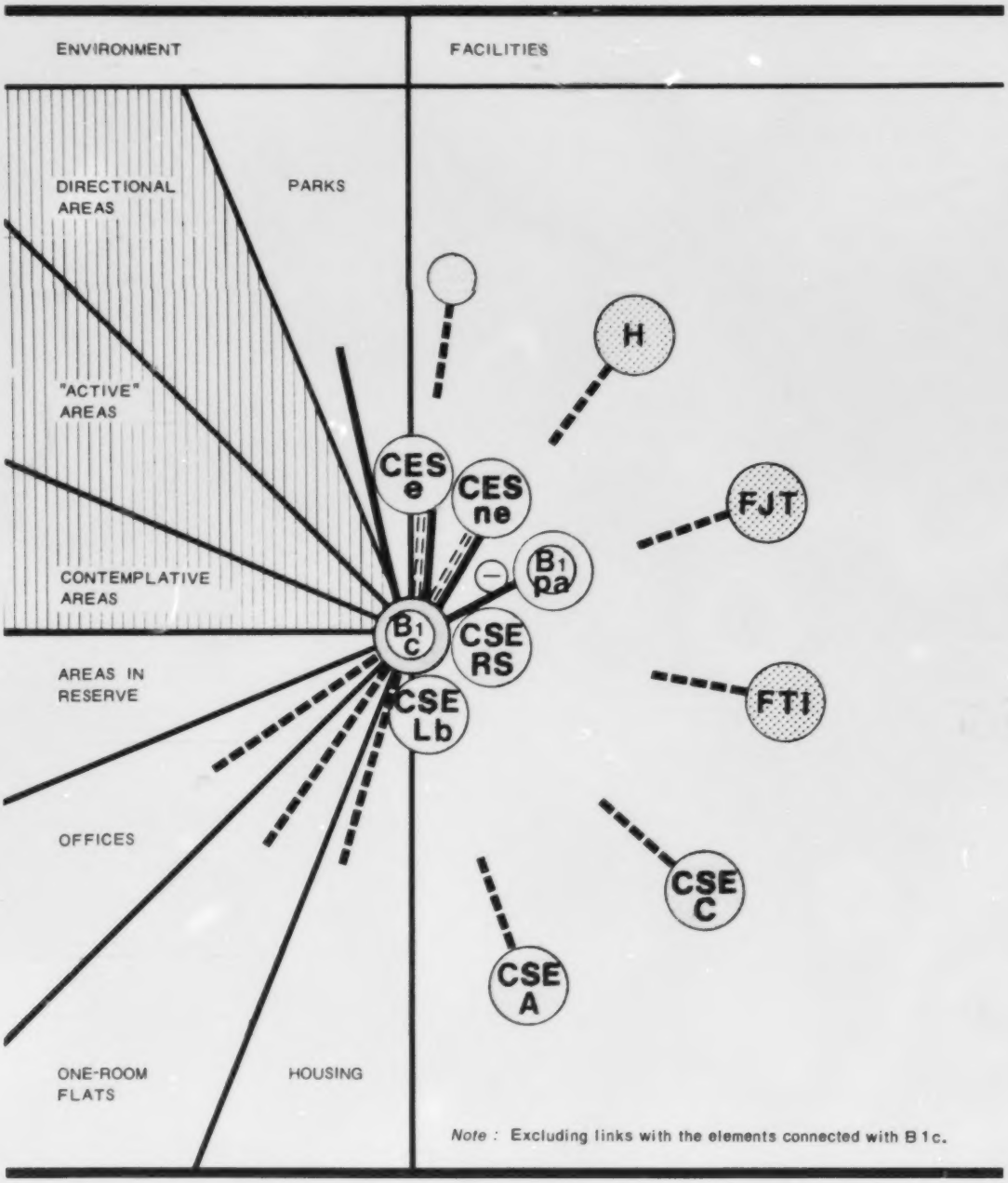
In spite of the present legislation on the location of places where drinks are sold, it was felt desirable to have one close to the indoor sports facilities (and therefore to the CES).

Three facilities, providing accommodation for publics likely to have certain sports activities are located less than 200 metres away from the indoor sports facilities B1: the hostel/hotel for immigrant workers, the hotel and the young workers' hostel.

Incompatible facilities — Nil.

Links with off-programme elements — Nil.

INDOOR FACILITIES (B1c)

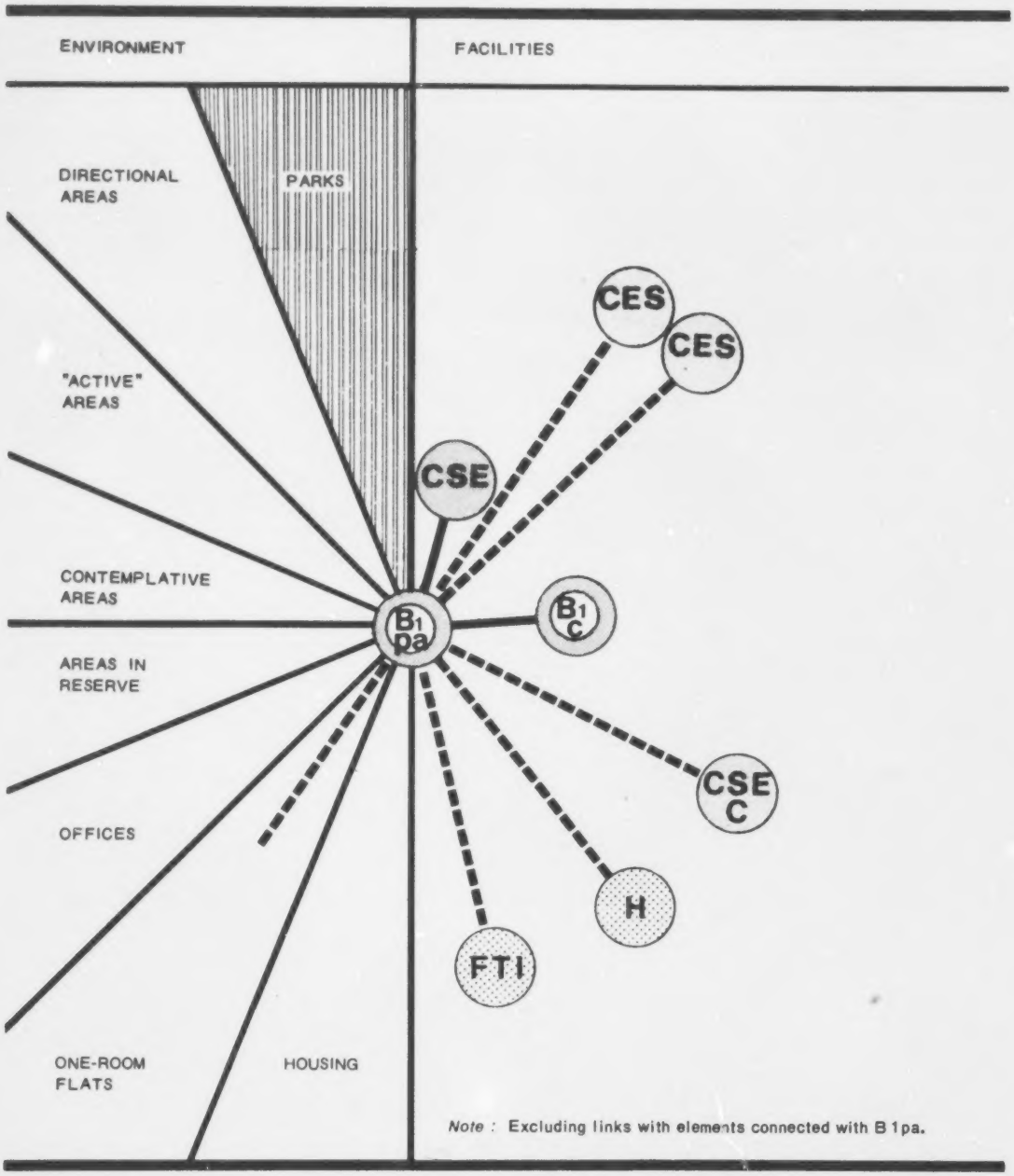


b) Outdoor Facilities (B1pa)

The outdoor sports facilities consist of a sports field for physical education, located in park B1 (programme requirement).

Associated Facilities	See indoor sports facilities (B1c)
Incompatible Facilities	The outdoor sports areas used by CES pupils in and out of school hours, and by local residents, should be relatively far away, or protected, from the busiest areas (pedestrian-only street, walk/drive plaza). This protection is provided by locating them in park B1.
Links with off-programme elements	Nil.

OUTDOOR FACILITIES (B 1 pa)



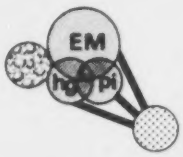
ADAPTATION TO MASTER PLAN

Noise disturbance from open air games is transferred into the periphery of the high density urban area where the gymnasia are located

CLUSTER CHARTS

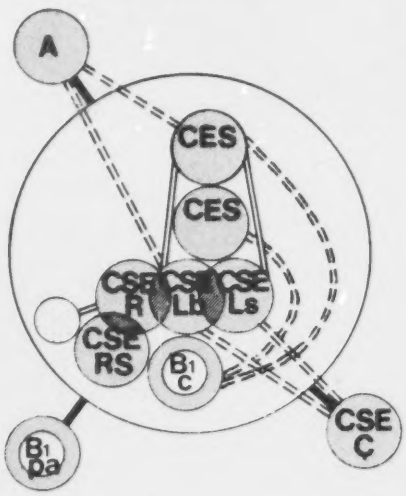
On the basis of a first synthesis of the links defined in the matrix and the element charts it is possible to suggest facilities clusters, of which two examples are given below:

Early childhood social/health centre



The early childhood social/health centre is made up of five elements, the first three being integrated together. The urban mini-garden is adjacent both to the premises specific to the nursery school and to those of the crèche. Lastly, the short-stay carpark is less than 50 metres away from the centre. A public transport stopping place is in the immediate vicinity.

The CES/CSE Complex



It is apparent that the CES/CSE complex is highly integrated: seven elements are integrated or adjacent to one another; three need not have physical continuity with the complex and, lastly, a café has been added. This is obviously a minimal theoretical chart. For instance, the CSE consultation rooms need to be less than 50 metres away from the complex but it would be better still if they were adjacent or integrated.

Depending on the options taken for the development of the district, these clusters can be grouped together to form sub-sets of facilities. For the whole of the district, three sub-sets have been identified:

- that connected with park A, consisting mainly of the nursery schools, primary schools, early childhood social/health centre and children's recreation centre;
- the sub-set orbiting around the shopping centre and grouping the central elements (place of worship, hotel, young workers' hostel, etc.);
- the sub-set connected with park B2, the chart for which is shown below as an illustration.

Sub-set Connected with Park B2

This sub-set consists of the building elements of the CES/CSE complex and the facilities associated with them. In order to make the chart more readily understood, not all the internal links in the complex have been shown (see chart for the CES/CSE complex on page 197 and the complex itself has been shown in an elongated form. In addition, all the links between the complex and the component parts of the sub-set orbiting around the shopping centre have been shown.

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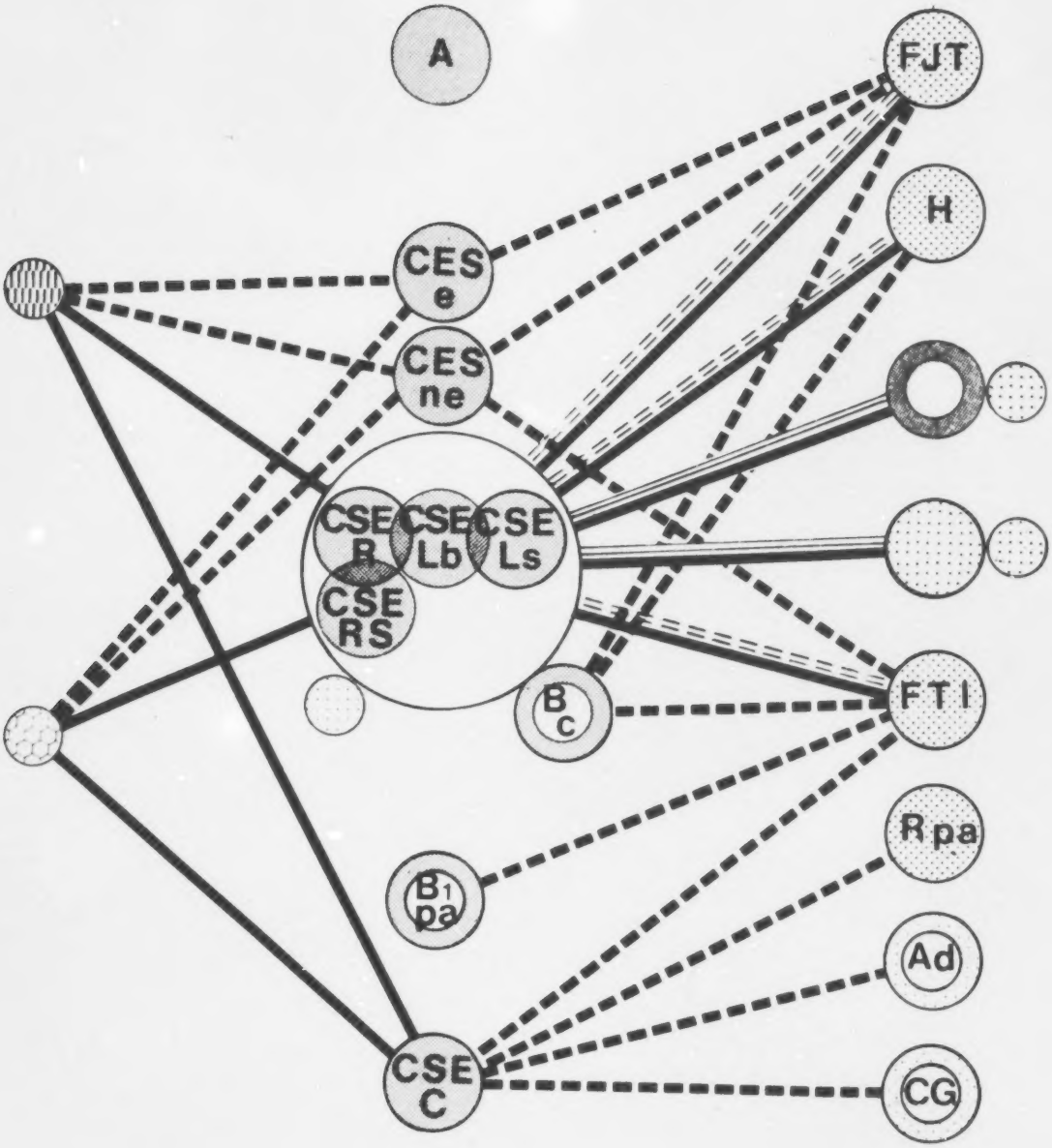
SUB-SET CONNECTED WITH PARK B2



GENERAL CHART

The general chart presents all the links entered in the matrix between all the elements of the nomenclature(1). However, a number of simplifications have been introduced as follows:

- facilities are grouped into clusters shown by circles and it is assumed that a proximity link between a facility in a cluster and one outside it applies to the whole of the cluster;
- certain choices have been made that are manifest in the type of representation; for example, a cluster has been formed out of the walk/drive plaza, the hotel and a café;
- some facilities could equally well be attached to the sports facilities associated with park A1 or those associated with park B1 (hostel/hotel for immigrant workers).

In all there are six clusters of varying size, as follows:

- the CES/CSE cluster;
- the walk/drive plaza cluster;
- the old people's home cluster;
- the shopping centre cluster;
- the early childhood social/health centre cluster; and
- the primary schools common services cluster.

The general pattern thus constituted is remarkably legible, due to the fact that the initial matrix was filled in after the general urban planning options had been decided. Clearly, from the filling in of the matrix to the drafting of this general pattern, the work was guided by the nature of these options which, themselves, compiled with the requirements of the programme.

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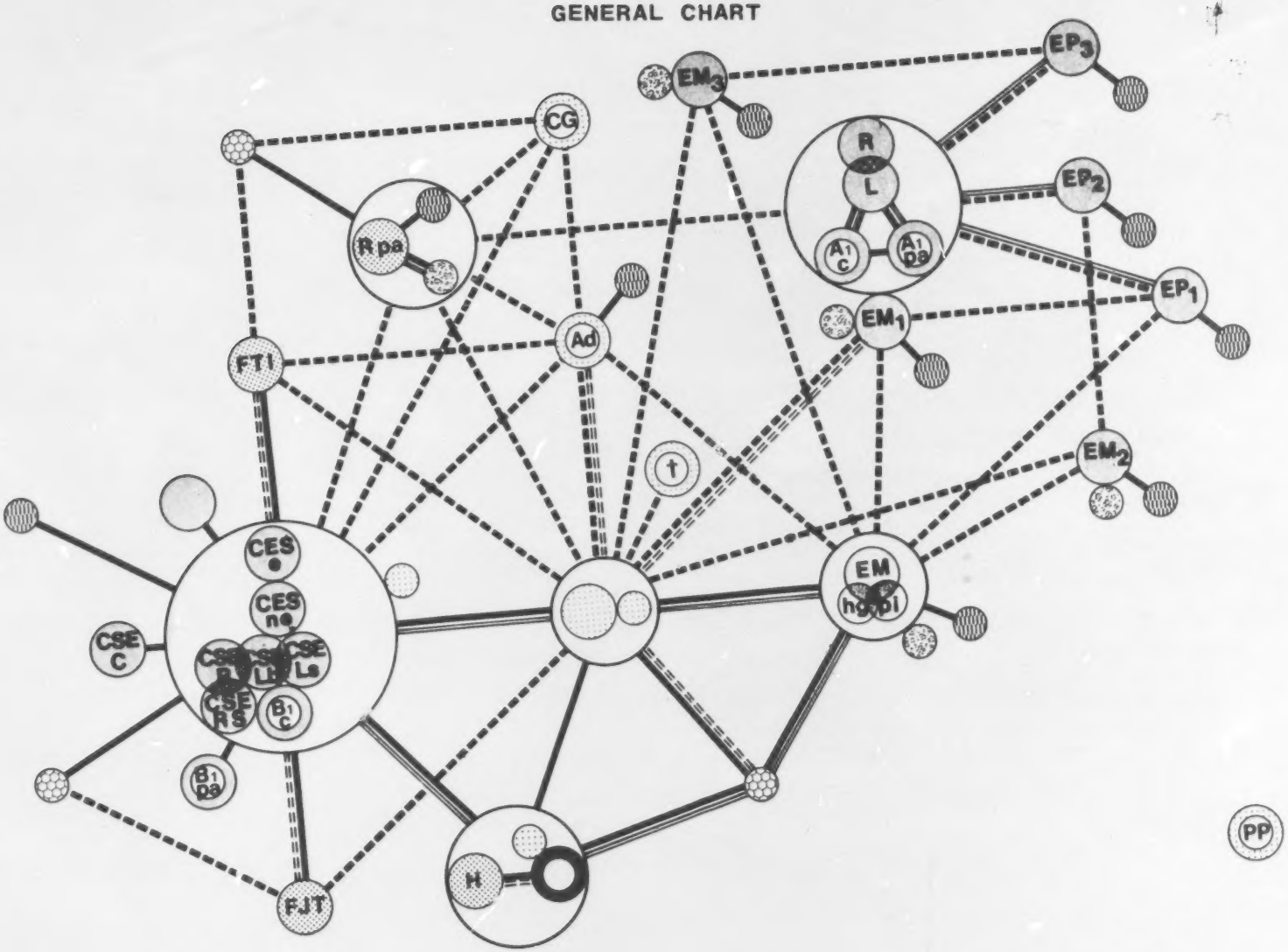
1) This is only one presentation out of the many that are possible. It takes into account the general urban planning options already worked out for the first phase of the competition.

GENERAL CHART



FROM THEORETICAL CHART TO MASTER PLAN

All these charts were handed over to the architects responsible for drawing up the final master plan. They therefore had:

- an initial sketch plan worked out for the first phase of the competition, defining the main urban planning options adopted, and
- all these charts, the fruit of analysis (element charts) and synthesis (sub-set charts and general chart), drawn up by taking into account the requirements of the programme and the general urban planning options adopted.

After things had gone back and forth several times and after fresh group discussions had been held between architects and general designers, the final master plan was agreed. The differences between it and the theoretical chart, and the reasons for them, are set out below.

One datum of the programme had been omitted when the matrix was being filled in: the need for adjacency between a nursery school and a primary school because of the need to accommodate inevitable changes in the numbers of pupils at the various levels. This link is not found in the theoretical charts and was reintroduced at the level of the master plan.

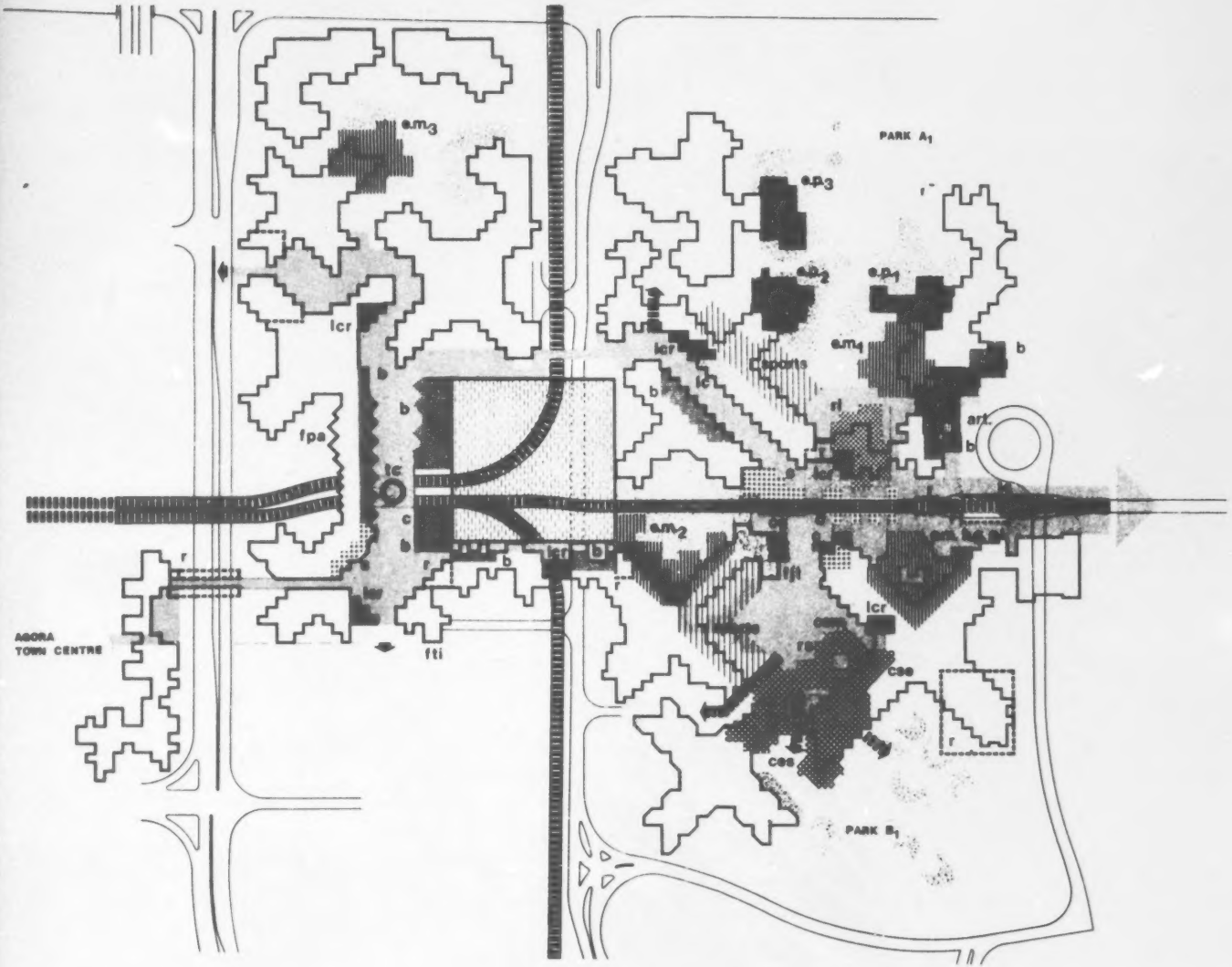
The constraints in time and resources implied by a competition of this kind did not allow the method used to be further developed, as would have been possible in theory. The method was thus applied to the "finished" district, making no allowance for the various phases of construction. Naturally, the effects of phased construction were introduced at a later stage. One nursery school (EM3), for example, was transferred to the first phase of the programme so that the first residents should not have to wait for the second phase to be built before they had the minimum necessary facilities. As a result, some links between nursery school N° 3 and other facilities (the "integrated" nursery school, for instance) failed to materialise.

Some changes to the programme were made whilst the location studies were being carried out, and even after they were finished. The number of public transport stopping places, for example, was reduced from six to five for the whole of the EVRY I programme. For the first district, this meant shifting one of the stopping places initially planned. Some proximity links (less than 50 metres) could not be maintained. The same applies to the cafés, the number of which was reduced from three to two.

The outdoor sports facilities had been placed at less than 50 metres from certain facilities incorporated in the built-up section. On due consideration, it was thought better to move these facilities away inside the parks so that the housing should not suffer any inconvenience from noise.

Lastly - and this is the only major contradiction between the theoretical chart and the master plan - the walk/drive plaza could not be kept in the immediate vicinity of the CSE/CES complex. The reason for this is that a location option had already been decided for the first phase which could not possibly be reconsidered without upsetting the whole of the urban planning scheme and the traffic pattern.

MASTER PLAN


e.m3
PARK A1
e.p3
e.p2
e.p1
e.m4
lcr
fpa
lc
e.m2
fti
AGORA
TOWN CENTRE
cos
PARK B1

Other links considered desirable by the working party were not fully maintained but, overall, it may be said that the master plan finally adopted does incorporate the larger part of the constraints that had been set and complies with the spirit in which the theoretical charts were drawn up.

CONCLUSION

Apart from a few contradictions(1), which have been explained and discussed, the working method used has performed its function in urban design. It must be stressed, however, that a study of this kind can in no way replace the process of inventing form. The stepping stone consisting of charting links between facilities and the thinking this involves merely allow the designer to set out possible options and to test the coherence of the set of options he takes against a number of morphological or sociological criteria.

Another point is the instructional aspect of this way of working:

within the design group (GARP) itself during the period just described: all participants (architects, engineers of various kinds, promoters, etc.) contributed their skills and viewpoints without the necessarily partial input from each member of the group impairing the coherence of the whole;

and above all in the reciprocal relationship with users: it is evident that, since the GARP succeeded in winning the competition, the method will be used also outside the group. Users and their various representatives on the spot(2) will naturally take part in the working parties organised in the same spirit as the panel of experts. In this way there may be some hope of reducing, no matter how slightly, the gap separating the user from the implementation of the project.

---

1) Contradictions are inevitable; the process of urban design can and should be rationalised but it cannot be perfectly scientific since otherwise it would become systematic and "mechanical".

2) Some of whom have already been consulted.

ADDITIONAL INFORMATION REGARDING THE DESIGN OF THE SOCIO-EDUCATIONAL COMPLEX (CES/CSE)

At the level of the programme, this complex consists of a CES (college of secondary education for 1 200 children), a youth centre and a medium-type social centre. Together with a sports facility, this complex is laid out around an open space that extends the pedestrian-only esplanade. A diversified route, via the central patio, passes right through this facility from the esplanade to the park without once traversing the premises themselves.

1. CES - SUPERVISED LEARNING (TEACHING)

Definition

This sub-set consists of the areas intended for teaching in its various forms. As teaching practice is at the moment, the spaces accommodate groups associated with a teacher. It is probable that trends in education will lead to more variety in the size of each group (from 6 to 150) and in teaching/learning modes. To prepare the way for such an evolution, the areas have been grouped in separate but sufficiently large and adaptable (long-term flexibility) sets (houses) with reasonably good sound insulation. In addition, this arrangement means that pupils can be split up into groups thus forestalling the crowd effect that is typical for establishments of this size.

Structure

The "teaching" sub-set is broken down into separate and relatively independent zones which nevertheless have considerable ease of communication between them. Some of these zones are intended for groups of pupils and others for the type of teaching requiring heavy equipment: the sciences.

A Zones - Houses

These are four, more or less identical, houses (A1, A2, A3, A4). In them a set of accommodation can be assigned to a total of about 300 pupils with no permanent allocation of rooms to class groups, although it is possible for free spaces to be taken over, occasionally, by informal groups.

B Zones - Science Department

Because of its specialised equipment this department allows little flexibility, calls for a certain measure of protection and is hardly suitable for use by too many or too different publics. The accommodation consists of laboratories designed to encourage group work. Continuity is provided between the natural science laboratories occupying the area of the two rooms normally reserved for this subject matter. Storerooms and rooms containing collections include office space for teachers.

2. CES - NON-SUPERVISED LEARNING (SELF-INSTRUCTION)

Definition

Here the areas are intended to provide schoolchildren with the means of learning on their own - in other words study activities they can follow in the absence of teachers or, if they are present, requiring from them no more than advice, guidance and possibly assistance.

The activities consist of:

- individual work by pupils;
- work done by small groups to supplement formal teaching;
- documentation and information retrieval;
- reading.

The self-instruction area (about 450m2) is open to the public at certain times and operates as a branch of the main public reading library in the Agora complex.

Structure

The library and reading spaces are continuous and form a single unit but this unit is very varied and offers a wide range of possibilities: consultation, reading, quiet and relaxation, and listening to recorded music (over earphones).

In this unit, the librarian's office is located in a key position from which the following are possible:

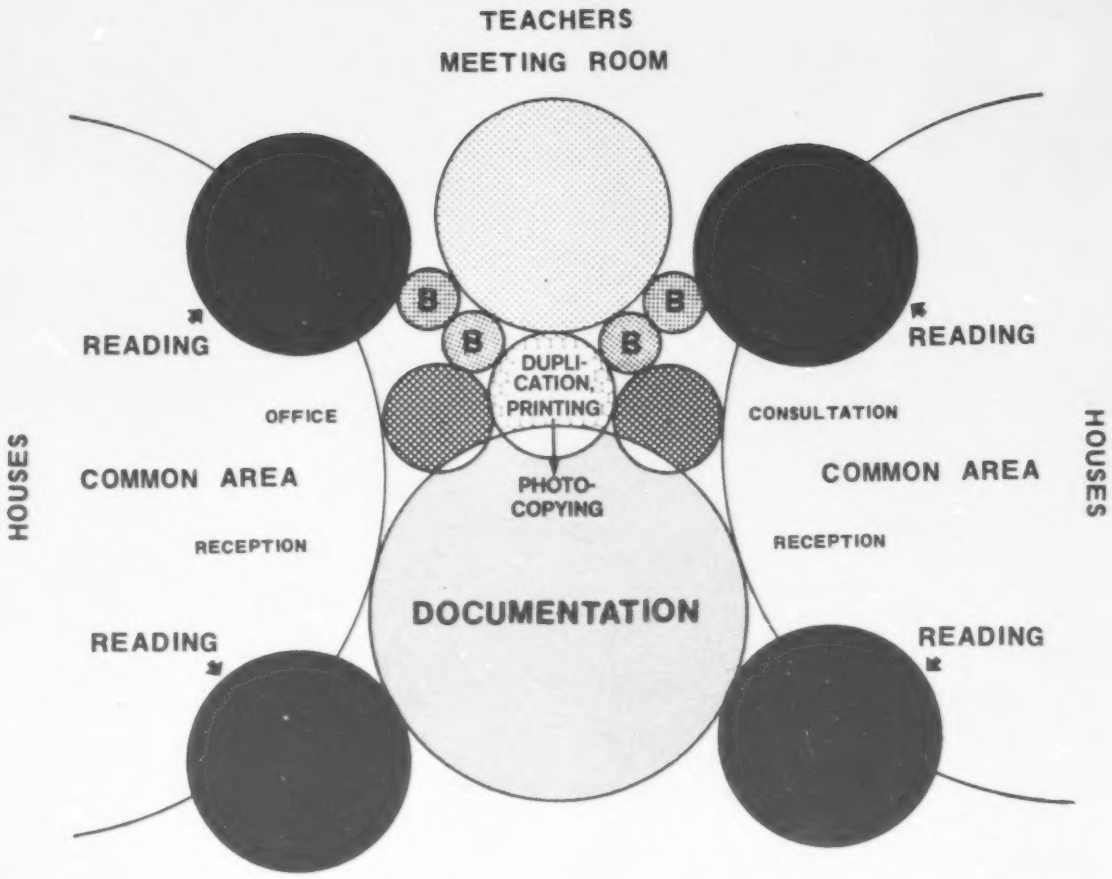
- control of the playing of recordings;
- handout of documentation and advice to readers;
- supervision.

It is easily accessible to everyone but can be securely closed.

The presence of teachers near to this self-instruction area means that they are available to provide assistance. Teachers must find it possible, in their own premises, to relax and do their own work.

The reception areas are a transition zone connecting with the common areas of the four houses of sub-set 1 (supervised learning). They share the same volume, as do the reading areas but the latter are partly protected from outside disturbance.

CES - NON-SUPERVISED LEARNING



3. CSE - GENERAL RECREATION

Definition

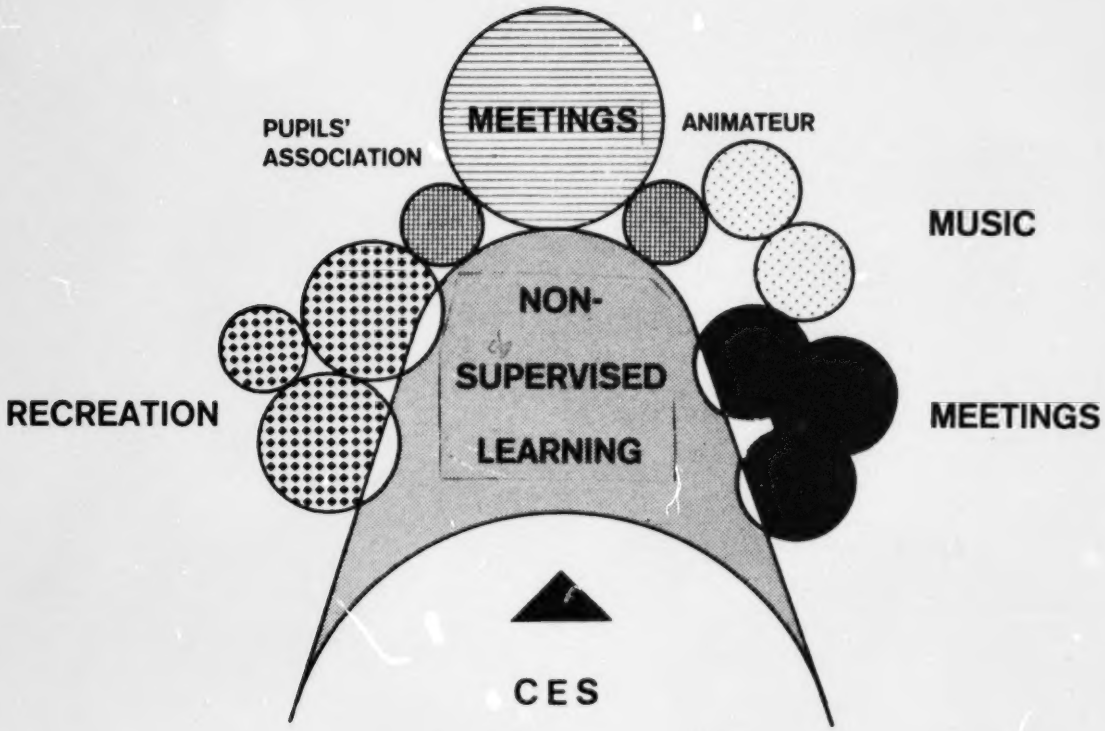
The areas in this unit accommodate organised or free-form recreational activities, not dictated by the form and nature of the areas. Open to both school and non-school publics, and therefore for general use, their role is not so much multi-purpose as non-defined. Thus the facility proposed under this heading offers many different opportunities for combinations or transformations on the initiative of the people using it. Experience, however, suggests that the accommodation will be used mainly for:

- meetings, clubs, quiet games, leisure reading or television;
- teaching/learning activities (though they may take non-traditional forms) supplementing the school activities taking place in Zone 1 - supervised learning;
- study activities supplementing those accommodated in the documentation or self-instruction unit of Zone 2 - non-supervised learning.

Structure

Because of its purpose, this sub-set can hardly exist on its own. It is therefore located in a transit area because it gains its significance through its links with the other sub-sets. Its internal structure is therefore relatively neutral. Nevertheless, these areas form a continuous chain in which the music rooms have a cul-de-sac position ensuring their relative isolation. The sub-set is completed by a cluster of LCRs (residential community premises) out of which it is proposed to make a base for the youth centre, consisting of an office and a meeting room. The point is that this is the "club" type of area (in which activities are not determined by the areas themselves) where an animateur is best able to perform his function.

C S E - GENERAL RECREATION



4. CSE - SPECIALISED RECREATION

Definition

The activities accommodated by this element come under the heading of both recreation and education. They are relatively specialised. Though CES schoolchildren have priority in their use they are also open to residents in the district outside school hours.

The standard programmes for CES provides for arts and crafts or practical activities. By using the possibilities offered by the programme of the youth centre, this range can be en larged to allow supplementary activities (photography, pottery, radio construction and do-it-yourself), leaving a certain degree of indetermination as regards the allocation of areas. Even so, it seemed necessary to supplement the domestic science room of the CES programme with a "cookery class" type of area and a workshop for home-crafts and home economics using areas taken from the social centre and LCR programmes. Indeed experience shows that activities of this type, in great demand among women, are usually concentrated in the afternoon during school hours when the CES premises are occupied.

Making these areas available for general use has certain implications:

- a double entrance is needed to allow communication both with the interior of the facility (school education) and with access points from the outside for the non-school public;
- the clusters formed by these areas, though designed in continuity with one another, can be closed off at certain points in order to isolate this or that area temporarily for functional purposes whilst leaving the others free of access;
- the lockable storage spaces are greater in number and capacity than in the usual programmes.

Structure

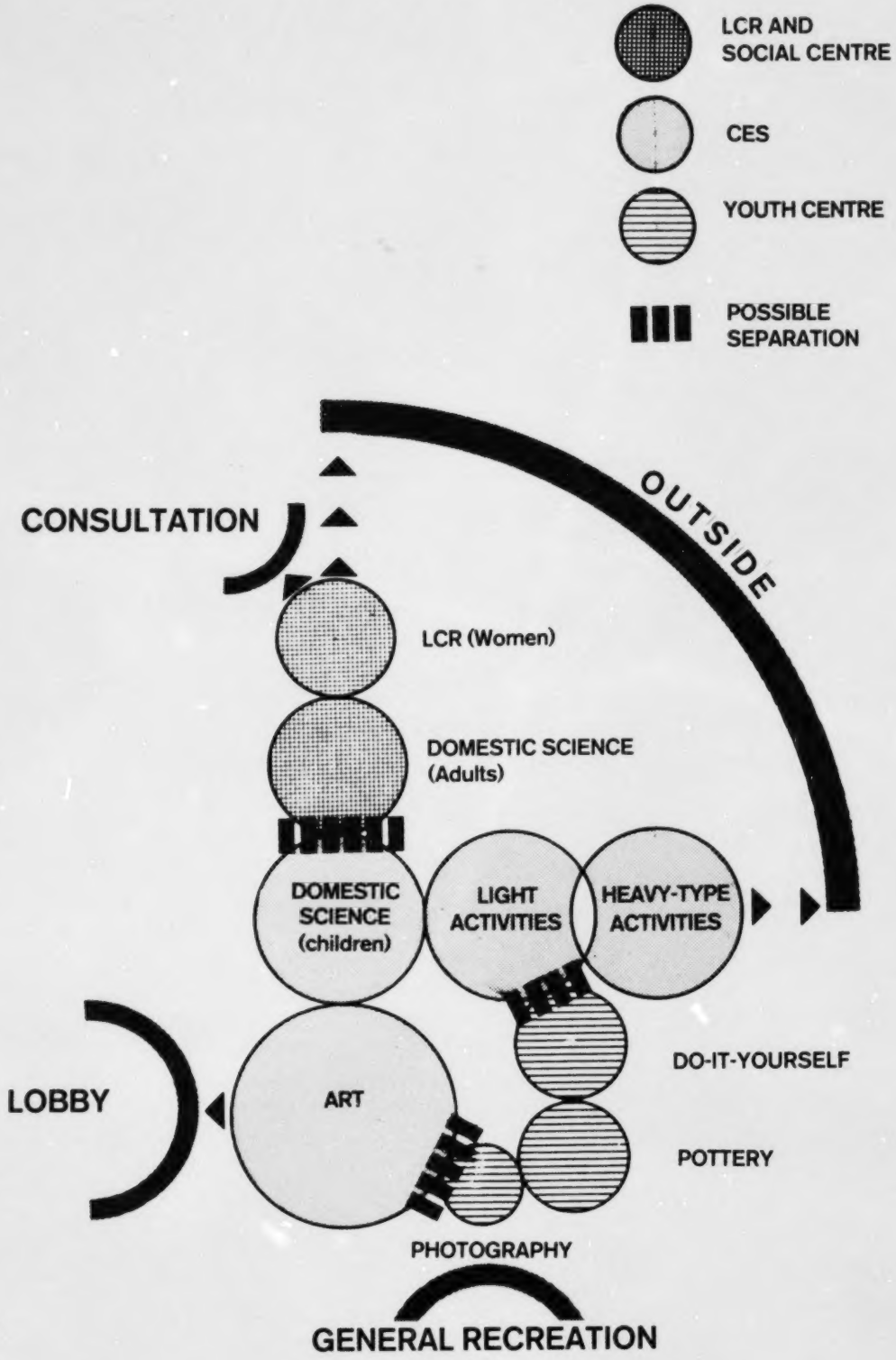
The overall idea is to facilitate interpenetration of various activities - which, in practice, complement each other - and therefore to provide easy passage from one to the other. The outcome is a continuous chain of communicating workshops which, nevertheless, each have the necessary lockable storage facilities for tools and special products.

5. CSE - CONSULTATION

Definition

These premises accommodate the social services run by the district centre for residents and the school medical service for pupils at the CES. They will therefore be used by residents in the district who will come, on their own in most cases, to ask advice or assistance. They include on-duty offices and a secretariat for the various associations in the district as well as facilities for meetings (small groups), with - for example - the social workers or other social "animateurs" with offices there. These requirements could very well grow and provision has therefore been made for LCR areas in this zone to supplement the areas available under the programme.

CSE - SPECIALISED RECREATION



Structure

In essence, this facility is a set of offices together with a medical consulting block. Its make-up is therefore simple. Privacy is allowed for, and at the same time the possibility of encounter - at the user's discretion - since there are a number of separate entrances.

6. CES/CSE - CATERING

The catering facilities are formed of the conventional elements of those of a CES day school. However, the dining room - designed as a cafeteria - is not planned for multi-purpose use, as is normally the case in new CES. The integrated facilities provide for a 400-seat hall which could fulfil the functions expected of a multi-purpose room but in far better conditions as regards comfort and equipment. It was therefore considered preferable to turn this space into a proper restaurant. This solution also fits in particularly well with the possibility of opening it to the public if this were one day decided. It also suits the possible use of the restaurant as an extension to the reading areas grouped around the library (direct communication). Similarly, the strong link with element 7 - encounter/public performance - means that the cafeteria there can be used as supplementary dining space and will facilitate the opening of the restaurant to the public, when the wish to do so is expressed.

7. CSE - ENCOUNTER/PUBLIC PERFORMANCE

Definition

The purpose here is to provide a centre for manifestations bound up with young people's life in and out of school and possibly for information meetings or various gatherings of the users to which the centre is open. The hall is a district hall (about 400 seats). It is not intended for use as a theatre or cinema since the big hall provided nearby in the Agora is equipped for the organisation of high-quality shows. It is designed more as a multi-purpose facility that can be used for various activities: occasional shows, instruction in play acting and eurhythmics, large meetings of various kinds, conferences, manifestations as part of the activities stimulating life in the district,

Structure

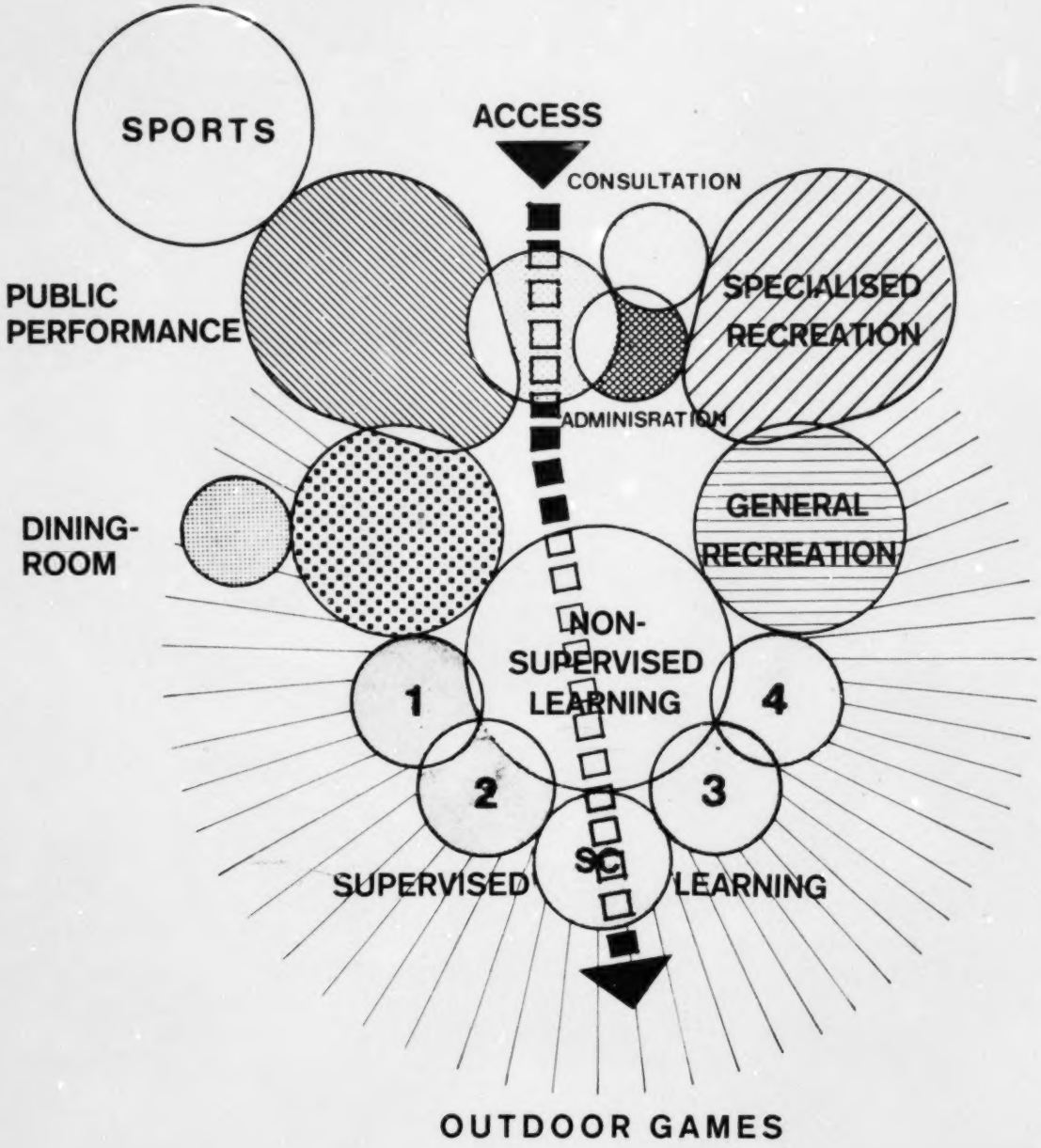
This is simple: there is a lobby providing access to the hall itself which in turn is supplemented by some ancillary rooms. Its accessibility from outside and from within the CES, and its connection with the sports facilities, the restaurant and general recreation facilities make it a crossroads and a vital tool for education and stimulation.

8. CSE - ADMINISTRATION

The administrative centre contains the offices and secretariats of those responsible for the educational, administrative and material management of the integrated facilities. To facilitate co-ordination of the activity programmes of all the institutions involved in these facilities, the administrative centre is so designed that all the management bodies can be housed in the same place. One floor, however, is reserved for the administration of the CES, whereas the management offices for the social centre and the youth centre are at the lower level, directly communicating with the premises for which they are responsible.

COLLEGE OF SECONDARY EDUCATION
SOCIO-EDUCATIONAL COMPLEX

FUNCTIONAL CHART



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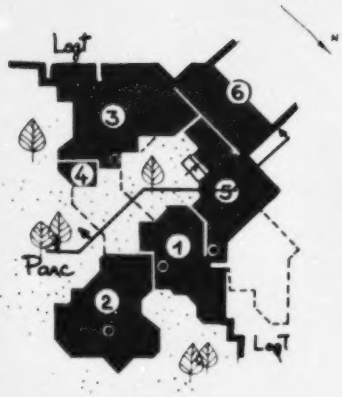
COLLEGE OF SECONDARY EDUCATION
SOCIO-EDUCATIONAL COMPLEX

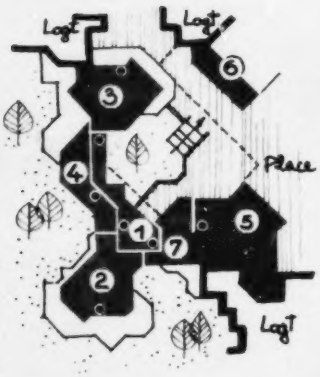
GENERAL PLAN



A.

A. Plan at level – 1 or park level

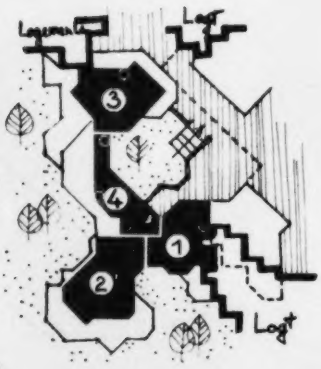
1. Specialised recreation (workshops)
2. Science
3. Catering
4. Consultation - medical block
5. Encounter/ public performance : multipurpose hall
6. Sports hall



B.

B. Plan at level 0 or place level

1. Entrance hall and circulation
2. Supervised learning : house 1
3. Supervised learning : house 2
4. Non-supervised learning : library/ documentation
5. General recreation (meetings) and consultation
6. Sports hall
7. Administration



C.

C. Plan at level + 1

1. General recreation (music, group activities)
2. Supervised learning : house 3
3. Supervised learning : house 4
4. Non-supervised learning : library/ documentation

BRIEF NOTES ON THE URBAN PLANNING AND ARCHITECTURAL APPROACHES PROPOSED FOR THE DISTRICT

The main interest of this project is the way it satisfies two contradictory trends:

- high density housing and facilities, imposed by the programme of the competition and necessary for urban life;
- housing with some of the features of the individual house (as opposed to a flat) that many French people desire.

The general organisation of this district, which will have a population of about 30 000, was therefore planned in the light of these two objectives.

Urban life will follow its course in the setting of public spaces which have to meet not only functional criteria (proximity to housing and facilities, accessibility to carparks for motorists, public transport, etc.) but also the legitimate expectations of residents (availability of green areas, separation between pedestrian and vehicle traffic, residents' feeling that the area "belongs" to them).

The setting for family life will be a well-planned dwelling with good sound insulation, always accompanied by a private outdoor area, a kind of roof-garden (averaging 20m2) as an outdoor extension to the living room.

Lastly, each housing unit will be individualised because no two dwellings in one building will ever be exactly the same; in addition, some partitions can be sited to suit the wishes of the householder.

The solution took the form of a stepped architectural design which served the additional purpose of giving the town an animated silhouette, in which the main centres of life are brought into relief by higher buildings, and also optically reducing the impression of height given by these buildings to the walking public.

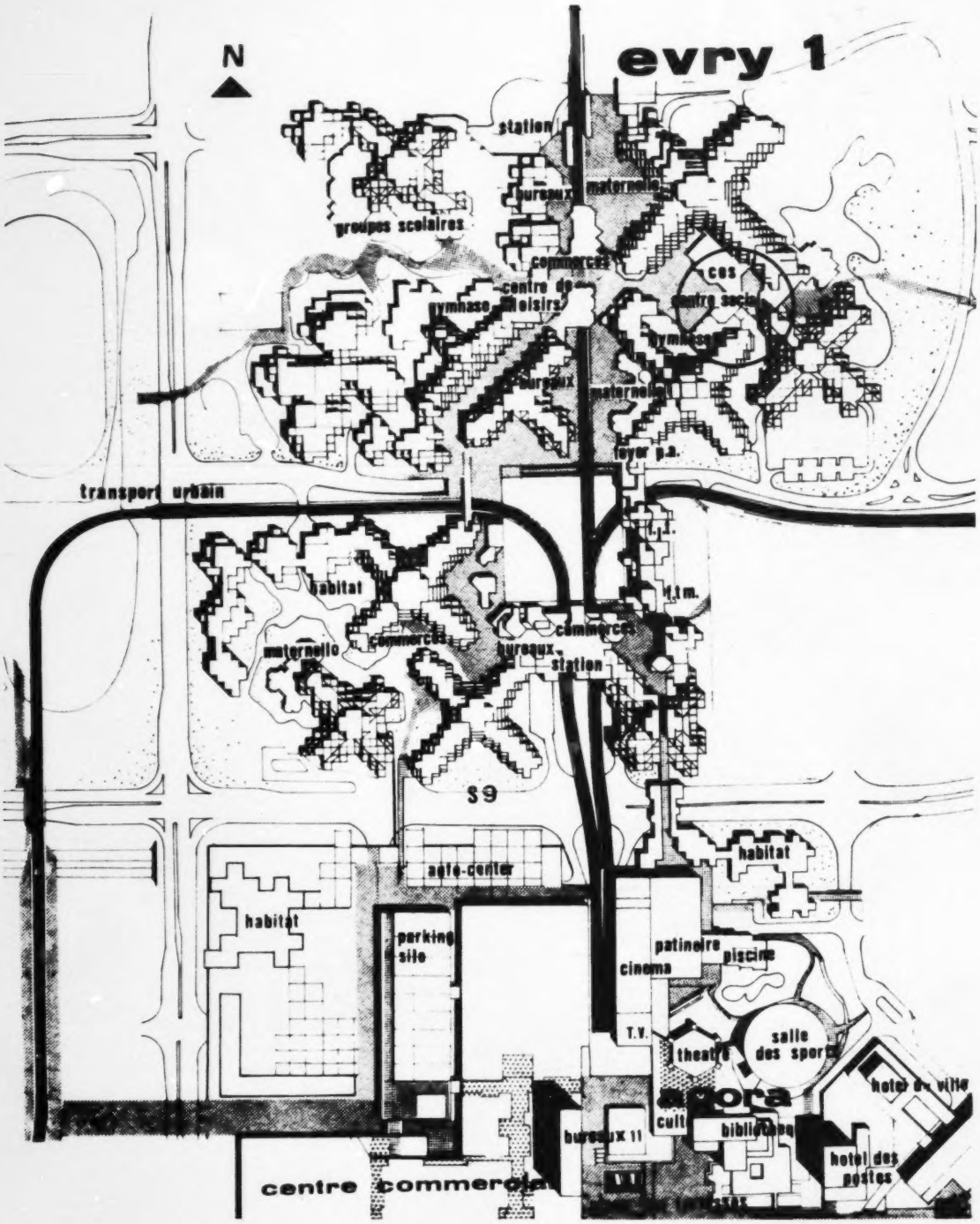
A succession of highly varied spaces (streets, squares, parks, and so on), the treatment of which was entrusted to different artists, and considerable variety in building size and facades give both unity and variety to the district.

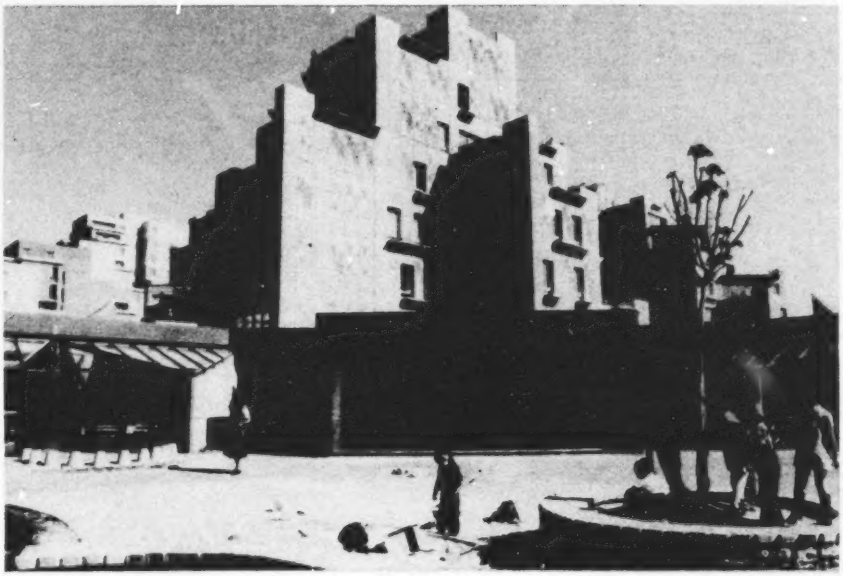
This study was developed for a first phase consisting of 2 500 housing units.

The use of simple elements capable of infinite combination will enable the principles adopted in this first phase to be carried forward into the following ones without any risk of monotony.

Each space and each group of buildings will have its own originality, making EVRY I really a new town and not just one more town.

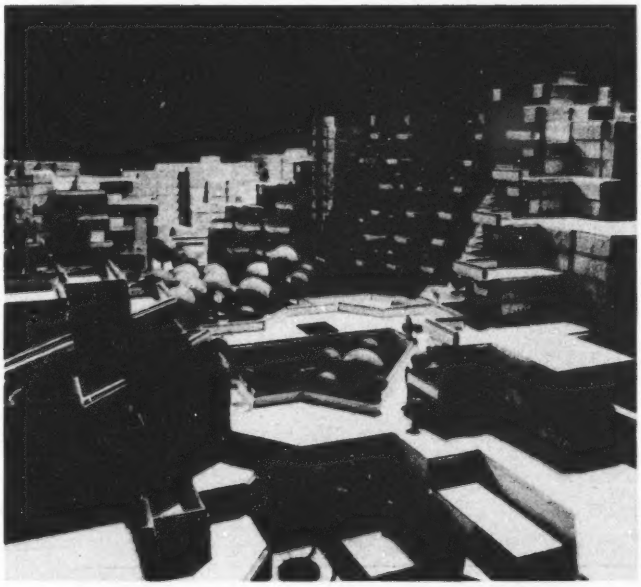
MASTER PLAN OF EVRY I





a. *Nursery school at the foot of a block of flats.*

b. *Mock-up of total district.*



c. *Detail of mock-up.*

Photos : Société Civile d'Architecture et d'Urbanisme.

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